

PART TWO
ECOLOGICAL ASSESSMENT

13.0 ECOLOGICAL ASSESSMENT METHODOLOGY

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13.1 General

13.1.1 In line with the Brief, the purpose of the Ecological Assessment is to provide an up-to-date evidence base for the Wealden Local Plan which:

- Assists the Council in determining the distribution of future growth and other land uses within the towns/settlements allocated growth as identified in the Wealden Local Plan.
- Assists the Council in developing future planning policies and principles which seek to protect, conserve and enhance local biodiversity and contribute to the District's green infrastructure network.
- Provides sufficient information to assist in the determination of planning applications and decision making in relation to protecting and enhancing the District's biodiversity in accordance with the NPPF and associated guidance.
- Provides baseline information to assist in the future monitoring of sites.

13.1.2 The methodology for undertaking the Ecological Assessment of sites within the areas identified for growth in the Wealden Local Plan is set out below. The approach is based on the principles provided by the following best practice guidance and relevant policy requirements:

- Guidelines for Ecological Impact Assessment (Chartered Institute of Ecology and Environmental Management, 2nd edition, 2016)
- National Planning Policy Framework (NPPF) and associated guidance.

13.1.3 The approach also reflects the methodology used in the Ecological Assessment of the Wealden Strategic Sites Local Plan¹.

13.1.4 The level of detail undertaken for the Ecological Assessment of each site is proportionate to the purpose of the study, the Site's characteristics and its location in relation to Designated Sites of nature conservation value.

13.1.5 The methodology described below is generally consistent with the methodology for undertaking the Ecological Assessment of sites within the Hailsham and Polegate areas undertaken by The Landscape Partnership.

13.1.6 Following a brief summary description of the Sites' general ecological character (broad habitat types and features), an assessment of the ecological baseline and an indicative ecological appraisal of each Site is set out as described below.

¹ Ecological Assessment of Wealden Strategic Sites Local Plan (The Ecology Consultancy for Wealden DC, January 2012).

13.2 Ecological Baseline

Green Infrastructure Context

13.2.1 A brief contextual description is provided of the natural and semi-natural features immediately surrounding the Site that contribute to the District's wider green infrastructure network. This should be read in conjunction with the overview of the Green Infrastructure Context for the relevant settlement described in **Section 1.3** with respect to ecological connectivity.

Desk Study

13.2.2 The Ecological Assessment of the Sites is informed by a desktop review of relevant biological records and data as described below.

13.2.3 Historic records held by the Sussex Biological Records Centre for a radius of 1km from the boundary of each site are considered. The data review encompasses:

- Protected Species² Register;
- Sussex Rare Species Inventory;
- Sussex Biodiversity Action Plan³ (BAP) Inventory;
- Sussex Bird Inventory;
- Sussex Bat Inventory; and,
- Sussex Invasive Alien Species⁴ Register.
- Habitat and natural feature data including: ancient woodlands⁵, species-rich grasslands, veteran trees etc.

13.2.4 Further datasets and information provided by Wealden DC used to inform the desk study include:

- Ecological Assessment of the Wealden Strategic Sites Local Plan⁶
- Sites designated for their nature conservation value⁷
- Ancient Woodlands
- High Weald AONB Management Plan 2014-19
- High Weald AONB Character Components data

² Protected species is a broad term to include any species afforded legal protection most commonly through their inclusion within the Wildlife and Countryside Act 1981 (as amended) (W&CA), The Conservation of Habitats and Species Regulations 2010 (The Habitats Regulations), s.41 Natural Environment and Rural Communities (NERC) Act 2006 and where relevant, species specific legislation such as the Protection of Badgers Act 1992.

³ The internationally recognized program addressing threatened species and habitats and is designed to protect and restore biological systems. The original impetus for these plans derives from the 1992 Convention on Biological Diversity (CBD).

⁴ Species whose introduction and/or spread outside their natural past or present distribution threatens biological diversity.

⁵ Any wooded area that has been wooded continuously since at least 1600 AD.

⁶ Ecological Assessment of Wealden Strategic Sites Local Plan (The Ecology Consultancy for Wealden DC, January 2012).

⁷ Commonly Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated under The Habitats Regulations, Sites of Special Scientific Interest (SSSIs) designated under the W&CA 1981 and Local Nature Reserves (LNRs) designated under the National Parks and Access to the Countryside Act 1949 (subsequently amended under the NERC Act 2006)

- Biodiversity Opportunity Areas⁸ (BOAs)
- Local Wildlife Site⁹ (LWS)

13.2.5 Where relevant, other data sources, such as the Government's Multi-Agency Geographic Information for the Countryside¹⁰ (MAGIC) website provided further information on relevant designations, habitat and agri-environment scheme coverage.

13.2.6 For each site, latest available aerial imagery (Google/Bing) and OS Explorer and 1:10,000 scale digital mapping is also used to inform the Ecological Assessments.

Field Survey

13.2.7 Phase 1 Habitat Surveys for each site were conducted between July and October 2016 by an experienced and qualified ecologist in accordance with the guidelines set out in 'Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit'¹¹, the nationally recognised methodology for the classification of habitats. Each site, including the areas immediately adjoining it, is covered by the survey.

13.2.8 Habitats and species of nature conservation interest are recorded, mapped and, where necessary, photographed, to provide a broad characterisation of the relative ecological value of each site and its immediate environs. In accordance with the 'Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit', where relevant, target notes are used to identify individual features of ecological interest on the Phase 1 Habitat Plans and in the accompanying assessment text where such features are not identifiable by the Phase 1 habitat mapping symbology.

13.2.9 In relation to surveys of Sites comprising residential properties and associated gardens and grounds, the following should be noted:

- **Amenity grassland** – all areas of amenity grassland were inspected. Individual species were not noted where the species composition did not differ significantly from that typical of this grassland type, i.e. common and widespread grasses and broadleaved species such as common daisy *Bellis perennis*, dandelion *Taraxacum officinale* agg., plantains *Plantago* spp. and white clover *Trifolium repens* etc. However, where species less common within this grassland type, or typical of other grassland types, were recorded this is noted.

⁸ Areas where conservation action, such as habitat creation, restoration or expansion, is likely to have the greatest benefit for biodiversity.

⁹ LWSs are non-statutory designations identified at a county level. They typically comprise sites as being of local conservation importance. They may also be known as Sites of Importance for Nature (SINCs) or County Wildlife Sites (CWSs).

¹⁰ <http://magic.defra.gov.uk/>

¹¹ Nature Conservancy Council (1990). *Handbook for Phase 1 habitat survey – a technique for environmental audit*. NCC.

- **Introduced shrubs** – this Phase 1 habitat type was used to capture ornamental/garden planting comprising non-native species within beds and borders, including specimen plants. These features may have included planting other than shrubs, for example herbaceous and seasonal. Species and varieties were not noted unless they were of ecological significance, such as the presence of invasive non-native species.

Potential for Protected and Notable Species

- 13.2.10 The potential of each site to support species protected by law, and species considered to be of notable nature conservation interest as a BAP priority species and/or their inclusion on UK Red Data¹² lists, is assessed by an experienced and qualified ecologist. The assessment is based on expert judgement about the suitability of the habitat features to support protected/notable species that may be present although not recorded during the field visit, taking into account field signs and the assessor's experience.
- 13.2.11 Recommendations for further, more detailed, surveys to determine presence/absence of protected/notable species are provided where the potential risk of their presence is considered to be sufficiently high to warrant the need for the surveys to inform further evaluation and/or mitigation.

13.3 Indicative Ecological Appraisal

Ecological Evaluation

- 13.3.1 The desk study and field survey data is used to evaluate the ecological value of each site. The criteria for determining ecological value of each site are derived from the CIEEM Guidelines for Ecological Impact Assessment, taking into account relevant priority habitats and species in the Sussex BAP in order to provide a local context for the evaluation process. The overall ecological value of each site is evaluated in relation to the following criteria:
- **Designations:** sites either wholly or partially within, or adjacent to, Designated Sites for their nature conservation value, including internationally and nationally statutory designations (SAC, SPA, Ramsar, SSSI, LNR), or non-statutory Designated Sites (LWS);
 - **Biodiversity Action Plan habitats:** sites supporting BAP priority habitats;
 - **Semi-natural habitats:** sites that include semi-natural habitats that are not otherwise classified above, such as species rich grasslands, hedgerow networks, ponds and watercourses;

¹² The IUCN Red List of Threatened Species (also known as the IUCN Red List or Red Data List), founded in 1964, is the world's most comprehensive inventory of the global conservation status of biological species.

- **Statutorily Protected Species:** sites that are either confirmed as supporting, or which have significant potential to support, species protected by law;
- **Biodiversity Action Plan species:** sites supporting BAP priority species, or having significant potential to support BAP priority species;
- **Red Data List (and other notable) species:** sites supporting Red Data List species, or having significant potential to support Red Data List species;

13.3.2 In addition to the above CIEMM criteria, the ecological value of the Sites is also evaluated in relation to the following criteria derived from the Defra guidance on selection of ‘Local Sites’ (Defra, 2006):

- **Size:** the size and extent of features of nature conservation interest, including habitats capable of supporting breeding, foraging and dispersing species of nature conservation value;
- **Fragility:** the relative fragility of the features of nature conservation recorded, both in their own terms but also in the context of the wider landscape, and their vulnerability to loss of degradation resulting from the potential effects of development;
- **Connectivity:** the extent to which habitats present on the Site link with, or provide connectivity between, semi-natural habitats in the wider landscape and contribute towards a functioning landscape that supports and enables the dispersal of species.

13.3.3 The above criteria are applied by an experienced and qualified ecologist on a site-by-site basis to determine each site’s nature conservation value in accordance with the broad categories defined in **Table 13.1**.

Table 13.1 – Ecological Evaluation Criteria

Ecological Value	Definition
High	Large sites that consist entirely, or in large part, areas of fragile BAP or high value semi-natural habitats in direct continuity and close association with adjacent Designated Sites, and contribute significantly to the wider ecological network. Known or high potential for supporting protected, BAP and/or notable species both in its own right, but also in relation to species listed as feature interests of the Designated Site(s).
Moderate to High	Sites of variable size consisting largely of fragile BAP or high value semi-natural habitats with some association with Designated Sites in close proximity and contribute variably to the wider ecological network. Known or high potential for supporting protected, BAP and/or notable species both in its own right, but also species listed as feature interests of the Designated Site(s).
Moderate	Sites of variable size that support some BAP or high value semi-natural habitats of variable resilience, not necessarily in association with Designated Sites but nevertheless contribute to some extent towards the wider ecological network. Known or with some potential for supporting protected BAP and/or notable species.

Ecological Value	Definition
Low to Moderate	Sites supporting limited extents of BAP or high value semi-natural habitats, but may include specific habitat features such as ponds and/or a hedgerow network. Generally isolated from the wider ecological network Limited potential for supporting protected, BAP and/or notable species.
Low	Sites supporting very limited or no BAP or high value semi-natural habitats and largely isolated from the wider ecological network. Very limited or no potential for supporting protected, BAP and/or notable species.

Mitigation

13.3.4 Suggestions have been made as to how potential impacts could possibly be mitigated in line with the mitigation hierarchy principles which underpin CIEEMs Guidelines for Ecological Impact Assessment. These are:

- **Avoidance** - Seek options that avoid harm to ecological features (for example, by locating the proposed development on an alternative site or safeguarding on-site features within the site layout design).
- **Mitigation** - Adverse effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.
- **Compensation** - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- **Enhancement** - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

13.3.5 Where possible, the mitigation measures are spatially explicit, particularly where habitats or features of high ecological interest were identified. In cases where such habitats/features could not be identified within the constraints of the survey (e.g. the presence of certain protected species, such as bat roosts in trees and buildings), the mitigation measures should be considered as provisional guidance subject to more detailed specialist surveys where appropriate.

13.3.6 The following guidance is provided for each Site:

- **Impact Avoidance** - options for avoiding harm to ecological features by retaining habitats on site within the site layout and design for development of the site.
- **Outline Mitigation** - recommended measures for mitigating potential ecological impacts of development on valuable habitats or protected/notable species.

13.3.7 Overall, the mitigation guidance aims to help in achieving a ‘no net loss’ of biodiversity in line with the NPPF and associated guidance.

Potential Enhancement Opportunities

13.3.8 Where applicable, opportunities for enhancing, restoring and/or creating new habitats as an integral part of a site's development that can also potentially contribute to the District's wider ecological/ green infrastructure network are identified. These opportunities provide a basis for informing site-specific policies in terms of achieving 'net gains' in biodiversity where possible in line with the NPPF and associated guidance.

13.3.9 Broadly, enhancement opportunities are identified, where applicable, for:

- Bringing into positive management (i.e. management focused on the conservation of biodiversity) habitats that may be retained as part of a development, but which historically may either not have been managed, or where management has ceased;
- Restoring habitats that may have fallen into neglect, for example, 'gapping up' hedgerows by new planting of appropriate species;
- Creating new habitats capable of supporting a variety of wildlife that may be expected to occur within the locality. In particular, creation opportunities that support habitats and species identified through the Sussex local Biodiversity Action Plan (LBAP); and,
- Installing features or structures designed to support a variety of wildlife, such as bird boxes and artificial bat roost boxes.

13.4 Limitations

13.4.1 It should be noted that the assessment and recommendations are provided for general guidance only. The assessment is focussed on identifying the key constraints and opportunities for development of the Sites to a level commensurate with the purpose of the Study as defined in Section 13.1.1.

13.4.2 It is not intended to be a detailed ecological survey and assessment of each site. Development proposals for an individual site would need to be informed by more detailed ecological surveys as appropriate and a detailed Ecological Appraisal and Mitigation Plan which develop the recommendations. In addition, it should be noted that other site constraints (such as landscape, archaeology, accessibility, and land ownership/availability and ground conditions for example) may also need to be considered in determining the suitability of a site for development.

Data

- 13.4.3 It should be noted that ‘absence of evidence is not evidence of absence’. A lack of records for any one or number of species may be a reflection of under-recording, rather than an absence of those species. Moreover, as some species data is only provided at a broad geographical resolution, even where records exist, the precise location for certain species cannot be accurately identified. The desk study data is therefore only an indicative guide to provide context for the potential ecological value of each Site. For this reason, recommendations for further surveys are provided where suitable habitat is present but no species data currently exists.
- 13.4.4 Data relating to the presence of Schedule 1 bird species, badgers and otters held by the Sussex Biological Records Centre is not taken into account by the Ecological Assessments, as this data was not provided due to the sensitivity of these records. Where necessary, surveys for these species are recommended in relation to sites.

Habitat Survey

- 13.4.5 Phase I Habitat Surveys provide a broad, high level, characterisation of a Site’s ecological value based on the habitat types recorded, incidental species observations and field signs. Furthermore, these surveys are based on a single site visit and are therefore not a detailed survey. For this reason, recommendations for further surveys are provided where there is considered to be suitable habitats to support species of conservation interest, or where field signs indicate the presence of such species.

Protected and Notable Species

- 13.4.6 Assessments to determine the potential presence of protected/notable species provide an indication of the likelihood or risk of their occurrence based on the types of habitats recorded and currently known distributions of those species. The currency of these assessments for informing decision-making are only valid at the time of the survey, and may be subject to changes in agricultural practice, tree felling or new development for example. For this reason, recommendations for further surveys are provided where there is considered to be suitable habitats to potentially support protected/notable species, or where field signs indicate the presence of such species.

Access

- 13.4.7 Where restricted access to sites within the timescales of the study prevented a Phase I Habitat Survey being undertaken, this is recorded.