

Ecology Guidelines for Site Assessments for the East Devon Local Plan 2020-2040

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Contents

1) Introduction	3
2) Desk based methodology.....	3
2.1) Methodology.....	3
2.2) Valuation of features	3
2.3) Scale of likely effects.....	4
2.4) Assumptions.....	4
2.5) Geographic value and significance of effects	5
2.6) HRA mitigation zones.....	6
2.7) On site assessment	6
2.8) Constraints	6
3) The process	8
3.1) Step 1	8
3.2) Step 2	8
3.3) Step 3 - On site assessment	8
3.3.1) Resources to aid in completion of the on-site checklist:	10
3.4) Decision Making.....	11
4) References	12

1) Introduction

This document serves as a guide for planners and explains the methodology and process behind the ecological assessment of potential options being considered for housing and employment allocation in the emerging Local Plan 2020-2040. It seeks to aid with the assessment of proposed allocation sites in accordance with the National Planning Policy Framework (Department for Levelling Up, Housing and New Communities 2023), associated planning practice guidance, the mitigation hierarchy and principles of the Environmental Impact Assessment (EIA) process.

This is a high level scoping exercise, designed to compare proposed sites for housing and employment allocation with each other, in order to identify those which are considered likely to have significant adverse ecological effects.

This process is consistent with paragraphs 180 (a, b and d), 181, 185 (b), 186 and 188 of the NPPF.

2) Desk based methodology

2.1) Methodology

The methodology comprises a desk study based system to rapidly assess the impacts of potential development sites on known designated sites and other habitats and features of nature conservation importance. The results of the desk based study are then ground trothed by a site visit, which also seeks to identify any features of ecological interest that may have been missed throughout the desk study exercise.

Known features of nature conservation importance were combined into a GIS database, showing the location of each feature. These features included statutory and non-statutory designated sites of importance for nature conservation, NERC Act (2006) Section 41 Habitats of Principle Importance, and Nature Recovery Network areas.

2.2) Valuation of features

To support the process, there was a need to determine the scale at which the ecological features identified are of value. The value of each ecological feature was defined with reference to the geographical level at which it matters. The frames of reference used for this assessment, based on CIEEM guidance (CIEEM 2018), were:

- International (generally this is within a European context);
- National (Great Britain);
- Regional (South West);
- County (Devon);
- District (East Devon);
- Local (ecological features that do not meet criteria for valuation at a District or higher level, but that have sufficient value to merit retention or mitigation); and
- Negligible (common and widespread ecological features of such low priority that they do not require retention or mitigation at the relevant location to otherwise maintain a favourable nature conservation status).

For the purpose of this exercise, given the resources available, it was not feasible to examine features of local value. It is acknowledged that these features, alongside others not specified do have ecological value. However, it is considered that impacts on these features would not typically result in significant ecological effects and would be relatively simple to avoid, mitigate or

compensate for through the DM process, and would not be significant enough to prevent site allocation. All features considered in this stage of site assessment were of District value and above, as impacts on these features are likely to result in significant adverse effects.

A full list of features considered, along with their geographical scale of value, is shown in Table 2.

2.3) *Scale of likely effects*

The proposed housing allocation sites mostly consist of “Major” planning applications (>10 dwellings), with many proposals ultimately requiring Environmental Impact Assessment (EIA), in accordance with the EIA regulations 2017. It is therefore considered logical to use EIA classification/assessment methodology to assess likely significance of adverse effects, in order to identify sites which are considered likely to have a significant adverse ecological impact.

The following scales of likely effects (Table 1) are derived from EIA and CIEEM EclA guidance.

Within EIA, effects which are moderate adverse or major adverse are considered to be significant.

Table 1 – Scale of likely effects (EIA and CIEEM)

Effect classification terminology used in EIA ES Chapters		Equivalent CIEEM assessment
Significant (beneficial)	Major beneficial	Beneficial effect on structure/function or conservation status at regional, national or international level.
	Moderate beneficial	Beneficial effect on structure/function or conservation status at District or County level.
Not significant	Minor beneficial	Beneficial effect on structure/function or conservation status at Site or Local level.
	Neutral	No effect on structure/function or conservation status.
	Minor adverse	Adverse effect on structure/function or conservation status at Site or Local level.
Significant (adverse)	Moderate adverse	Adverse effect on structure/function or conservation status at District or County level.
	Major adverse	Adverse effect on structure/function or conservation status at Regional, National or International level.

2.4) *Assumptions*

Several assumptions have been made in order to simplify the process (reducing complexity and resource). These assumptions have been applied in accordance with the precautionary principle, i.e., where the exact impacts of a proposal are unknown, decision makers should take act on the side of caution, considering the highest likely potential impacts in absence of scientific certainty.

Assumption 1 – In absence of mitigation and evidence to the contrary, the process assumes a large ecological impact on features within the site boundary or within 100 m of the site, as a result of

direct impacts (habitat loss, habitat degradation, disturbance, increased lighting etc.) and immediate indirect impacts (disturbance, pollution and potential for light spill within 100 m of the site).

Assumption 2 – Significant indirect impacts on Habitats sites (such as increased recreational disturbance of the East Devon Pebblebed Heaths SAC and Exe Estuary SPA, phosphate increases in the River Axe SAC and impacts on the foraging and commuting habitats of bats using the Beer Quarry and Caves SAC) will be mitigated against effectively through the existing and developing Habitats Regulation Assessment (HRA) mitigation strategies for these sites. These strategies will ensure that proposals will not adversely affect the integrity of the Habitats sites. Consideration of these impacts are therefore not accounted for during this assessment process. Note is taken of whether the proposal site is within the HRA mitigation zones, to provide comparison between sites.

Assumption 3 – Section 41 habitats vary in rarity and sensitivity, and therefore the geographic scale of value (and subsequent significance of adverse effect) will vary. It is considered that S41 habitats are likely to vary between District and County value, where not present within another designation of a higher value (i.e., when not forming part of a SSSI). Section 41 habitats have therefore been valued at County value. Certain Section 41 habitats have been excluded from assessment. Refer to section 2.7 (constraints).

Assumption 4 – Unconfirmed Wildlife Sites (UWS) are sites which are considered likely to contain Section 41 habitats or mosaics of high quality habitats which are likely to qualify for County Wildlife Site (CWS) status, but are not yet confirmed. In accordance with the precautionary principle, in absence of scientific certainty these sites are included within the methodology as sites with identical value to County Wildlife Sites (CWS).

Assumption 5 – Protected and notable species are likely to present on all allocation sites. These species often have an impact on proposed site layout. For example, bats require dark corridors around the perimeters of sites to facilitate foraging and commuting, and dormice require compensatory nesting/foraging habitat when existing habitat is lost. Dormice and bats are widespread throughout East Devon, and are likely to be present in all rural and suburban habitats. It is expected that the proposal sites will take this into account, and provide space within their proposed development footprint to account for necessary protected species provision, or provide suitable local off-site alternative habitats to meet the conservation objectives of these species.

2.5) *Geographic value and significance of effects*

The below table shows the sites and features considered in the process, alongside their geographically defined value and likely scale of adverse ecological effect.

In accordance with paragraph 187 of the NPPF, potential Special Protection Areas (pSPA), proposed RAMSAR sites and possible Special Areas of Conservation (pSAC) were considered. None of these features were present in East Devon District. They were therefore excluded from the process.

Table 2 – Geographical valuation and scale of ecological effects

Site/feature name	Geographical value	Likely scale of adverse ecological effect if the feature is within or bordering the proposal site (within 100 m)
Special Area of Conservation (SAC)	International	Significant major adverse
Special Protection Area (SPA)	International	Significant major adverse
RAMSAR site	International	Significant major adverse

Marine Conservation Zone (MCZ)	National	Significant major adverse
Site of Special Scientific Interest (SSSI)	National	Significant major adverse
National Nature Reserve (NNR)	National	Significant major adverse
Local Nature Reserve (LNR)	Regional	Significant moderate adverse
Ancient Woodland Inventory Site (AWI)	Regional	Significant moderate adverse
County Wildlife Site (CWS)	County	Significant moderate adverse
Unconfirmed Wildlife Site (UWS)	County	Significant moderate adverse
Nature Recovery Network areas (NRN)	County	Significant moderate adverse
Section 41 (S41) Habitat of Principle Importance (including rivers and streams, excluding hedgerows)	County	Significant moderate adverse

2.6) *HRA mitigation zones*

Note was taken of whether or not the proposal sites were within any of the EDDC HRA mitigation zones, in order to provide comparison between sites, beyond the significance of likely adverse ecological effect considered above. The protected sites associated with these zones all have the potential to be negatively impacted by increases in housing and employment. The inclusion of these sites within the assessment therefore accounts for potential indirect and cumulative impacts on European Sites. This factor can be used to further refine site selection, helping to select sites for allocation with the lowest impacts on European sites. These zones include:

- River Axe SAC Nutrient catchment
- Beer Quarry and Caves SAC bat consultation zone
- East Devon Pebblebed Heaths SAC HRA mitigation zone
- Exe Estuary SPA HRA mitigation zone
- Pebblebed Heaths 400 m exclusion zone

2.7) *On site assessment*

An on-site assessment was made for each site. The purpose of the on-site assessment was to try to identify any features of ecological importance that may have been missed by the desk study (i.e., Section 41 habitats which are not mapped, and other key features), and confirm the presence of features which are identified.

These features will be noted, complete with detailed pictures in order to aid assessment. These will help to identify features which may be missed in the desk study, and aid future decisions regarding avoidance and mitigation measures which might form part of allocation conditions.

A checklist was made to simplify the process and keep the assessments consistent.

2.8) *Constraints*

For the purpose of this exercise, given the resources available, it was not feasible to examine features of local value. It is acknowledged that these features, alongside others not specified, do have ecological value, but this did not fit with the purpose or remit of this high-level scoping exercise. It was considered that features of local value can be adequately mitigated through the DM process.

Hedgerows were excluded as a S41 habitat, due to the frequent occurrence of S41 hedgerows in the district. If these were included within the assessment, then every assessment would result in a significant moderate adverse effect. Hedgerows were considered elsewhere in the process, when on-site checks are carried out.

It was beyond the scope of this exercise to assess impacts on individual species. Assessment of impact on individual species was not possible without detailed survey and is dependent on many factors. Assumption 5 is included to explain this, stating that best practice mitigation is expected.

Not all S41 habitats are included within mapped resources, i.e., there might have been S41 habitats on proposal sites which were not included in the mapped habitats. The on-site assessment made an assessment of whether or not any unmapped S41 habitats were present, as well as ground-truthing the presence of S41 habitats identified during the desk study.

In reality, intra-feature valuation is likely to vary. For example, S41 habitat types vary in rarity and sensitivity, and therefore the geographic scale of value (and subsequent significance of adverse effect) vary with specific habitat type. It is considered that S41 habitats, where occurring individually, are likely to vary between Local and County value, where not present within another designation of a higher value.

The NRN mapping is in first draft format, and is likely to change in coming months. EDDC acknowledges this, but does need to give consideration to emerging policies and strategies to ensure that sites are not allocated within strategic nature recovery areas, leading to inconsistency and conflicts in the near future.

The level of ecological impact on nearby receptors could vary in relation to the level of public access to that receptor. For example, a SSSI 100 m away from a site with no public access may suffer no ecological impact, but a SSSI 100 m away with public access could be negatively impacted by increased recreational pressure. It is considered that these issues would be identified and mitigated within the DM process.

3) *The process*

3.1) *Step 1*

The assessor will measure the distance (in metres) of the proposed allocation site from features/zones listed in Table 2 and Section 2.6.

The distance from features is then entered into the assessment spreadsheet. The excel sheet applies a “WhatIf” formula, in order to auto-fill the “Likely scale of adverse impact” column, based on the predicted scale of impacts shown in Table 2 (i.e., if distance between the site and the feature measures between 0 and 100 m, the formula will auto-fill the scale of impact (as shown in Table 2, or a statement of no significant adverse effect).

The “Likely scale of adverse impact” column will therefore be populated with one of three options:

1. “Minor adverse effect predicted (not significant)” (where no features listed in Table 2 are present either within the site, or within 100 m of the site)
2. “Significant moderate adverse effect predicted” (where features of regional and county value listed in Table 2 are present either within the site, or within 100 m of the site)
3. “Significant major adverse effect predicted” (where features of international and national value listed in Table 2 are present either within the site, or within 100 m of the site)

The “Comments” column would be completed, showing the name of the features concerned and any other relevant notes that the assessor sees fit.

3.2) *Step 2*

The assessor enters Yes or No in the following columns, to state whether or not the proposal site is within a HRA mitigation zone.

- “Within River Axe SAC Nutrient catchment”
- “Within Beer Quarry and Caves SAC bat consultation zone”
- “Within East Devon Pebblebed Heaths SAC HRA mitigation zone”
- “Within Exe Estuary SPA HRA mitigation zone”
- “Within 400 m of the East Devon Pebblebed Heaths SAC”

The assessor then completes the adjacent column “Number of European sites potentially impacted by the proposal”.

3.3) *Step 3 - On site assessment*

The on site assessment takes the form of a checklist, to be completed by the assessor visiting the site. The purpose of the on-site checklist is to try to identify any features of ecological importance missed by the desk study (i.e., Section 41 habitats which are not mapped, and other key features). These features will be noted, complete with detailed pictures in order to aid assessment. These will help to identify features which may be missed in the desk study, and aid future decisions regarding avoidance and mitigation measures which might form part of allocation conditions.

The on site assessment takes the form of the below checklist.

On-site ecological checklist for housing allocations

Site name:

Date:

Assessor:

Feature	Feature present (yes or no)	Notes (location, species recorded, habitat type thought to be present – take detailed photographs of all features)
ECO1 - Do the land/field parcels consist of any habitats other than agriculturally improved grassland or arable (excluding small/negligible areas of habitat)		
ECO2 - Presence of veteran or ancient trees		
ECO3 - Large numbers of mature trees within hedgerows or otherwise		
ECO4 - Presence of ponds not identified on aerial imagery		
ECO5 - Networks of small field parcels and hedgerows (any areas where allocation is likely to require removal of substantial areas of hedgerow to facilitate a suitable development footprint?)		
ECO6 - Any other incidental features of ecological interest (protected/notable species incidentally recorded)		
ECO7 - Is there any evidence which contradicts the desk study results?		

The outcome of the on site checklist process is used to confirm and refine the results of the desk study, and update the assessment spreadsheet.

3.3.1) Resources to aid in completion of the on-site checklist:

(a) Improved grassland

Improved (modified) grassland refers to agriculturally improved grassland, of low biodiversity value. This habitat exists where, due to agricultural inputs, the grassland species composition is very low in terms of species diversity, typically with less than 6 species per m². The sward is typically dominated by perennial ryegrass (*Lolium perenne*) and white clover (*Trifolium repens*). Perennial ryegrass is very verdant and shiny on the underside of the blades, which give the appearance of a shiny field of green grass in most light conditions.

Examples of improved grassland fields



(b) Veteran and ancient trees

The following definitions are taken from the Woodland Trust “Ancient Tree Guide 4” (Woodland Trust 2008).

Ancient tree: An ancient tree is one that has passed beyond maturity and is old, or aged, in comparison with other trees of the same species. Its canopy may be small.

Veteran tree: Veteran is a term describing a tree with habitat features such as wounds or decay. The terms ancient and veteran have been used interchangeably in the past, however, it is important to know what the differences between them. A veteran tree is a survivor that has developed some of the features found on an ancient tree, not necessarily as a consequence of time, but of its life or environment. Ancient veterans are ancient trees, not all veterans are old enough to be ancient. A

veteran may be a young tree with a relatively small girth in contrast to an ancient tree, but bearing the ‘scars’ of age such as decay in the trunk, branches or roots, fungal fruiting bodies, or dead wood. These veteran features will still provide wildlife habitat.

(c) Networks of small field parcels

Networks of small field parcels should be identified where the proposals are considered likely to result in significant hedgerow loss in order to facilitate the development. For example, internal hedgerows within a site boundary are likely to be removed to facilitate development if the total site area is small.

3.4) Decision Making

The process provides assessors with three potential outcomes, which have implications for allocation decision making.

Outcome	EDDC decision making
Minor adverse effect predicted (not significant)	No known ecological reasons not to allocate the site. Minor adverse effects are likely to be mitigated with relative ease through the planning DM system.
Significant moderate adverse effect predicted	Potential to consider not allocating the site due to significant ecological effects, which may be able to be avoided by not allocating the site. Considerable on site avoidance and mitigation measures are likely to be required in order to ensure no impacts on the features present. Compensation may be required as a last resort. Potential to allocate the site with appropriate avoidance/mitigation conditions.
Significant major adverse effect predicted	Sites in this category should only be allocated where it is proven that no suitable alternatives exist, and that suitable avoidance and mitigation measures could be implemented to ensure no residual impacts on the features affected. Compensation may be required as a last resort. Potential to allocate the site with appropriate avoidance/mitigation conditions.

In principle, EDDC should not allocate sites with likely significant adverse ecological effects (moderate and major), unless it is proven that no suitable alternatives exist, and that suitable avoidance, mitigation and compensation measures could be implemented to ensure no impacts on the biodiversity features concerned.

There is scope for further assessment between sites by comparing the number of “European Sites potentially impacted by the proposal” column. For example, where a choice has to be made between two sites which are equal in all other attributes, but one has a potential impact on 2 European sites and the other has an impact on 1 site or no sites, the site with less potential impacts is preferable.

Training in use of the process will be given to all assessors. All sites with predicted significant adverse effects (Moderate and Major) will be subject to confirmative assessment by the District Ecologist, to assess the findings of the process, evaluate and provide comments, including recommending

conditions and layout proposals in order to avoid and mitigate against potential ecological impacts where possible.

4) References

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