

BREEAM LAND USE AND ECOLOGY



ces ecology
consultant ecologists

What is BREEAM?

BREEAM (British Research Establishment Environmental Assessment Method) is used to assess the sustainability of new developments. A pre-development assessment is undertaken and recommendations made by various specialists, including ecologists. The specialist reports are then compiled and assessed by a BRE accredited assessor who will issue an interim accreditation certificate. The development will then be assessed again following completion of the development when the final BREEAM certificate is awarded.

BREEAM schemes

There are several different types of BREEAM scheme including:

- Courts
- Education
- Industrial
- Healthcare
- Offices
- Retail
- Prisons
- Multi-residential

BREEAM categories

Within each of the schemes there are categories in which credits are awarded. These categories are:

- Management
- Health and wellbeing
- Energy
- Transport
- Water
- Materials
- Waste
- **Land Use and Ecology**
- Pollution
- Innovation

BREEAM Land Use and Ecology

Within the land use and ecology section there are usually six categories (more are available under certain BREEAM schemes). To gain certain credits a 'Suitably Qualified Ecologist' (SQE) is required to have surveyed the site and make recommendations. CES employ ecologists who meet the SQE requirements.

The six categories with the Land Use and Ecology section are:

- LE1: Reuse of land
- LE2: Contaminated land
- LE3: Ecological value of the site AND protection of ecological features
- LE4: Mitigating ecological impact
- LE5: Enhancing site ecology
- LE6: Long term impact on biodiversity

LE1: Reuse of land

This credit encourages development on land that has previously been used for industrial, commercial or domestic purposes in the last 50

LE2: Contaminated land

This credit encourages development on land that was contaminated but has been remediated prior to development.

LE3: Ecological value of the site AND protection of ecological features

A survey would evaluate the ecological value of the site and make note of any important ecological features such as mature trees or ponds.

Recommendations would then be made within the report regarding adequate protection measures for any features of ecological importance.

It is therefore important to commission an SQE to undertake this survey prior to any development works, including site clearance taking place.

LE3: Ecological feature: Mature oak tree



IMPORTANT: If you are aware at the design/planning stage that you require an ecology report as part of your planning application and are aiming for BREEAM accreditation, please inform CES when requesting a quotation as in most cases a single report resulting from one site visit can satisfy both planning and BREEAM requirements. An Extended Phase 1 Habitat Survey will highlight the need (or not) for any specific protected species surveys and allow the SQE to calculate the ecological value of the site. It is beneficial if the developer/architect/design team attends the site during this survey so that potential recommendations for both BREEAM and any protected species mitigation that may be required can be discussed at this early stage. This will allow site specific recommendations to be made within the BREEAM report that are in keeping with the proposed development. Involving an ecologist at this early stage can lead to more credits being achievable within the Land Use and Ecology category.

LE4: Mitigating ecological impact

In this section credits are awarded where there will be a minimal or positive change in the ecological value of the site. The existing ecological value of the site is based on the number of species per square metre for each habitat type. The same calculation is then carried out on the proposed development. The change in ecological value of the site is the difference between the existing and proposed ecological value (i.e. the change in species diversity). In order for an existing site value to be calculated a site visit (i.e. an Extended Phase 1 Habitat Survey) needs to be carried out prior to any development activity taking place.

LE5: Ecological enhancement: Bat box



LE5: Ecological enhancement: Native hedgerow



LE5: Enhancing site ecology

There are three credits available in this section. For the first to be awarded, a SQE needs to have been appointed and have provided a report which contains appropriate recommendations for protection and enhancement of the site's ecology. This report must be based upon a site survey (i.e. Extended Phase 1 Habitat Survey). These recommendations have to be implemented for the post-construction credit to be awarded.

For the second and third credits the SQE will provide recommendations within the ecology report for enhancing site ecology and increasing the number of species present. Usually a range of different options for enhancing site ecology will be provided so that the design team has a choice. Recommendations are site specific but may include a variety of options such as fruit tree or native hedgerow planting, providing bird or bat boxes or improving an existing habitat such as clearing an overgrown pond.

An extensive list of wildlife friendly planting is also usually provided so that the landscaping team has a wide range of species from which to choose, although the ecologist will usually indicate minimum species diversity in order for credits to be achieved.

LE6: Long term impact on biodiversity

Two credits are available within this section; for one credit to be achieved all mandatory requirements and at least two of the additional requirements must be completed. For two credits to be achieved all of the mandatory and all of the additional requirements must be completed.

Mandatory requirements:

- SQE appointed prior to commencement of activities on site.
- The SQE confirms that all relevant UK and EU legislation relating to protection and enhancement of site ecology has been complied with during the design and construction process.
- A landscape and habitat management plan is produced.

Additional requirements:

- Contractor nominates a 'Biodiversity Champion'.
- Contractor trains the site workforce on how to protect ecology.
- Contractor records actions taken to protect site ecology.
- A new ecologically valuable habitat, is created (e.g. UK BAP or LBAP habitat).
- Where flora/fauna exists on the site the contractor programmes site works to minimise disturbance to wildlife.

IMPORTANT: For the SQE to confirm mandatory requirement 2, they will need to see evidence of ecological surveys being undertaken and any mitigation schemes (if required) which have been designed and implemented. In the case of certain protected species this will involve a protected species development licence method statement. It is therefore beneficial to use one ecological consultancy for all ecological aspects relating to your development.

CES can provide:

- Protected species surveys
- Protected species mitigation
- Habitat management plans
- Biodiversity champion inductions

The following categories are also available for BREEAM education assessments of schools: LE7: Consultation with students and staff and LE8: Local Wildlife Partnerships.

As CES are the trading arm of Cheshire Wildlife Trust (CWT) we are uniquely positioned to facilitate the establishment of a local wildlife partnership and can use the wildlife trust to facilitate the consultation workshops with staff and students. CWT offer educational visits to schools and so are well aware of the potential of school grounds to be used as a valuable teaching aid. These skills can easily be transferred to facilitating a meeting between the design team, staff, students and the SQE to create school grounds which meet everyone's needs. Establishing this partnership at the design stage can also help the school to manage and use their grounds in the future.



LE7: Consultation with students