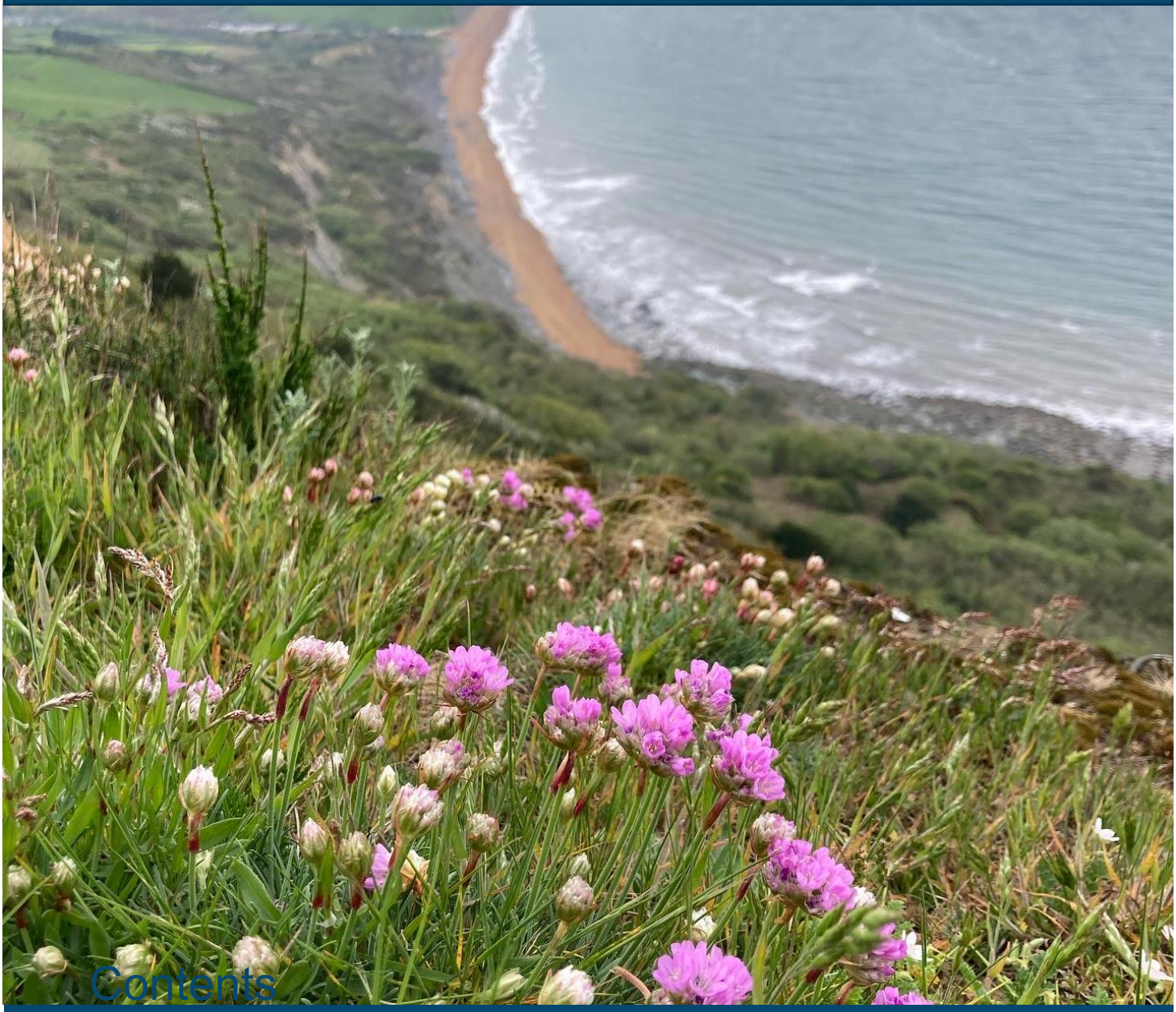
Dorset Biodiversity Appraisal Protocol



Contents

Guidance for consultants

Section 3 – Mitigation

©Dorset Council, 2024. Version 2

Dorset Council

Contents

Errors, corrections, and revisions

We aim to minimise errors within the text of the DBAP guidance. Where text contains a substantive error, a correction will be made as soon as practicable, and the relevant section of the guidance reissued. Reissues will be sent out via email and appear on the DBAP website pages. Where an error does not change the meaning of the guidance but ought to be corrected to avoid misleading readers, for example an incorrect reference, a correction via email list will be issued as soon as practicable. If errors are minor and do not change the meaning of the guidance, they will not be corrected until the next scheduled annual revision.

Scope

This guidance is not exhaustive. Some guidelines are referenced in the text but are not reproduced in full. Information submitted under the DBAP is expected to comply with all relevant guidelines in terms of both content and presentation.

Biodiversity Net Gain (BNG) will be applicable to some submissions also in the scope of the DBAP. Where this is the case, quantifying habitat losses and gains is done through the use of the statutory metric. Mitigation requirements for species can only contribute to achieving no net loss within the metric.

1. Introduction

1.1. This section sets out more information on how mitigation must be achieved relating to particular ecological features. The mitigation hierarchy set out in the National Planning Policy Framework (NPPF) (2023) states**:**

1.2. '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.' (Paragraph 186 (a)).

1.3. The NPPF also identifies how the planning system should contribute to and enhance the natural and local environment (Paragraph 180), including:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland
- minimising impacts on biodiversity and providing net gains in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures (see Section 1)

1.4. Submissions are expected to explain how the mitigation hierarchy has been applied to their project. The retention of ecological features and links must be a priority on all projects submitted under the DBAP.

1.5. For the purposes of the Dorset Biodiversity Appraisal Protocol (DBAP), the term 'mitigation' typically refers to measures, within the red line planning application boundary or blue line wider boundary, that reduce and / or minimise impacts. The term 'compensation', in the context of habitat loss, is used where a residual loss on-site is addressed either by habitat creation outside of the red line planning boundary or blue line ownership boundary. Compensation outside of the red line boundary may also be required where there are residual impacts to other ecological features.

1.6. Development is expected to avoid features of high ecological value such as important hedgerows, priority habitats, and local and national wildlife sites such as Sites of Special Scientific Interest (SSSI), and Sites of Nature Conservation Interest (SNCI) (Dorset County Wildlife Sites).

1.7. Development is also expected to ensure the 'continued ecological functionality' of a site for protected species through appropriate mitigation. If impacts on priority habitats or protected species cannot be avoided or mitigated, then development will be required to provide compensation.

1.8. Habitat losses and gains must be clearly demonstrated, with appropriate mitigation and off-site compensation identified. For applications which are subject to mandatory Biodiversity Net Gain (BNG) this will be demonstrated within the Biodiversity Metric and other supporting documentation. Developments which are exempt from demonstrating Biodiversity Net Gain must still clearly present this information.

1.9. Presentation of losses and gains is not limited to residential and industrial development but must also be presented for other projects, including habitat restoration or other projects which are intended to benefit biodiversity.

1.10. Mitigation must minimise impacts by changes to design, timing or working practices, to the point where at a minimum, there is a neutral effect on biodiversity. For smaller development sites this may not always be possible in which case off-site compensation must be considered.

1.11. Adequate surveys must be undertaken to inform the mitigation and net gain required. (BS 42020, chapter 6).

1.12. Developments involving grassland must have a botanical assessment at an optimal time of year and reports must be accompanied by a full plant list with DAFOR categorisation. Appendix 1 provides a list of indicator species and Dorset Notables which should be referred to on assessment of the onsite habitat. Any deviation from this must be agreed with NET prior to submission and must be fully justified and supported by an appropriate desk top study.

1.13. Mitigation and precautionary measures must be designed into schemes at the earliest opportunity. Applicants must commit to all necessary mitigation measures via approved Ecology report(s) / the Biodiversity Plan prior to a decision being made on a planning application.

1.14. Where guidance is published that prescribes mitigation it must be adopted. Where necessary and appropriate bespoke mitigation can be put forward for consideration by the NET.

1.15. The LPA must be provided with the degree of surety about the likelihood of the efficacy and practicality of the mitigation. Where monitoring of mitigation is appropriate, the mechanism for this must be clearly given in the BP or Ecology report(s). For example, the nature and duration of compliance visits and bat roost monitoring and who will undertake the monitoring must be written into the BP or Ecology report(s). Applicants must be made aware by consultants that all measures within the BP or Ecology report(s) form a condition of their planning permission.

1.16. Where degradation of habitat(s) is to be undertaken as an avoidance measure for protected species, care must be taken to ensure the method statement accounts for all likely species which could be using the habitat. This may mean additional checks of the

habitat prior to clearance where species have conflicting seasonality for habitat degradation works.

1.17. An appropriate and proportionate level of ecological supervision / Ecological Clerk of Works must be included in BP or Ecology reports(s).

1.18. The BP or Ecology report(s) must include detail of when the works / measures will be completed.

2. Hedgerows

2.1. A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less that 20m wide. Any bank, wall, ditch, or tree within 2m of the centre of the hedgerow is part of the hedgerow habitat, as is the herbaceous vegetation within 2m of the centre of the hedgerow. All hedgerows consisting predominantly (i.e., 80% or more cover) of at least one woody UK native species are defined as priority habitat.

2.2. As linear features hedges make a unique contribution to biodiversity. Assessment must consider the number of woody species and the type of ground flora present, length, distinctiveness, condition, and spatial relationship as well as their protected species, landscape, or historic value. An assessment of age must refer to a range of data including old maps and documents where available.

2.3. A review of hedgerow designations and different assessments was undertaken for the NET by Dorset Environment Records Centre to ensure all significant hedges are fully identified. *Identifying and Assessing Significant Dorset Hedgerows, Bryan Edwards, Dorset Environmental Records Centre (January 2022).*

2.4. The hedgerow assessment for the DBAP combines criteria from the UK Priority Habitat definition, Hedgerow Regulations (1997 and amendments) and Species-rich Hedgerows, DEFRA Hedgerow Survey and includes local features that make hedges in Dorset special.

2.5. A hedgerow qualifies as a Significant Dorset Hedgerow if it meets one of the following criteria:

1. having **5 or more woody species** native to Dorset per **30m** section (chosen in accordance with the methodology set out in the Hedgerow Regulations (1997)[1]
2. having **8 or more woody species** native to Dorset along the **entire length** of the hedge[1]

[1] Refer to Box 5 *Identifying and Assessing Significant Dorset Hedgerows, Bryan Edwards, Dorset Environmental Records Centre (January 2022)*.

3. having 5 or fewer native woody species per 30m section or 8 or in the whole hedge, but **7 or more ground layer 'woodland' indicator species**[2].
4. supporting **1 or more Red Listed species** within the IUCN categories CR, EN, VU, NT[3]
5. supporting **1 or more Section 41 species** of Principal Conservation Importance under the NERC Act 2006
6. **features of local distinctiveness** such as double-hedged green lanes, droves and Holloways, and the presence of veteran and ancient trees including coppiced stools and layered boles

2.6. An example template for the above hedgerow assessment is included as Appendices II-IV of the guidance.

2.7. Other species such as bramble and climbers like honeysuckle which are not classed as woody or indicators will be important for S41 species and must be valued appropriately in the overall assessment.

2.8. Hedgerows qualifying as Significant Dorset Hedges will be viewed in a similar way to a SNCI or a grassland of local interest and proposals to remove them or sections of them will not be acceptable under the DBAP. The mitigation hierarchy must be applied seeking to avoid impacts through design to avoid loss or damage rather than attempting to mitigate them.

2.9. Identifying and assessing Significant Dorset Hedgerows, Bryan Edwards, Dorset Environmental Records Centre (January 2022) and The Hedgerow Survey Handbook (Defra, 2011) is recommended reading for more detailed guidance.

2.10. The overall assessment taking into account length, distinctiveness and condition and spatial relationship will provide the basis for determining the level of mitigation and / or compensation required.

2.11. Developments affecting hedgerows must be subject to adequate survey for protected species including activity and hedgerow tree surveys for bats, surveys for hazel dormouse and reptiles and amphibians. Where indicated by initial phase 1 surveys, professional judgement and desk top survey records, additional surveys may be required, at appropriate times of year, for other S41 species for example Breeding Bird Surveys and specialist invertebrate surveys. Hedges will be considered 'affected' by disturbance during construction and the proximity of development boundaries as well as removal of all or sections of hedges. Therefore, surveys for hazel dormouse must be undertaken even where the removal of part or all the hedge is not planned. This is to

[2] Refer to Box 6 & Box 7 *Identifying and Assessing Significant Dorset Hedgerows, Bryan Edwards, Dorset Environmental Records Centre (January 2022)*.
[3] Examples of Section 41 and Red listed species can be found in *Identifying and Assessing Significant Dorset Hedgerows, Bryan Edwards, Dorset Environmental Records Centre (January 2022)* p23, para 7.1.

take account of the potential for development proposals to change and to establish appropriate buffers - for both during and post construction - at the outset.

2.12. Mitigation measures can include the restoration and enhancement of existing hedges; however, a measurable upgrading of distinctiveness and / or condition must be demonstrated.

2.13. Improved management and gap planting which is less than 20 metres in any one length will not qualify as mitigation for hedgerow loss and will be considered as 'enhancement' contributing to securing biodiversity net gain rather than as mitigation.

2.14. Where a hedge will be translocated on-site, or a new hedge is being planted adjacent to the location of an existing hedgerow there may still be a requirement to address the interim loss of biodiversity value and function.

2.15. Hedges bounding green lanes and double hedges must be treated as two hedges and not a single hedge and as Significant Dorset Hedgerows.

2.16. Removal of a hedge with more than 90% non-native species comprising its structure will need to apply mitigation as, for example, it may be used as a navigational feature by bats.

2.17. Where trees are present within the hedge line the Root Protection Zone must be increased as per BS 5837:2012. See part 5. below for veteran trees.

2.18. All retained hedges and new hedges which are included as mitigation or net gain must not be included within gardens of new residential development and must be buffered e.g., by public open space, SANGs, public rights of way and other green infrastructure and SUDS features.

2.19. During construction hedgerows must be protected by appropriate buffers of no less than 2m from the edge of the hedge, increasing to allow protection of root protection zones in-line with BS 5837:2012 Trees in relation to design, demolition, and construction.

2.20. New hedgerow planting must aim to create a hedgerow habitat with features such as banks and ditches with buffers. Planting must consider local variation in species composition with a minimum of 8 woody species including year-round nectar sources (February to October).[4]

2.21. New hedgerows must include standard native trees. The Countryside Stewardship grants scheme advice under TE1: Planting standard hedgerow tree recommends irregular spacing with a minimum of 20m between trees to allow for full crown development.

[4] Refer to Box 9 *Identifying and Assessing Significant Dorset Hedgerows, Bryan Edwards, Dorset Environmental Records Centre (January 2022)*.

2.22. For the operational phase of development hedges within development sites must be subject to a permanent – to be retained for the lifetime of the development - minimum 2m buffer either side of the hedge starting at the edge of the hedge. For non-residential developments this will be increased to a minimum 5m buffer (Cornwall planning for Biodiversity Guide).

2.23. Hedgerows with protected species interests will also require a buffer during and post construction and this must be agreed with the NET. Where linear habitats e.g., hedgerows, scrub, ditches tree lines, river corridors etc., act as commuting and foraging features for highly light sensitive bat species – long-eared bats, Myotis (which include whiskered, Natterer's, Brandt's, Daubenton's and Bechstein's), barbastelle and greater and lesser horseshoe bats – a minimum buffer of 6m with a long sward is required along its entire length. This must be measured from the edge of hedgerows and must be incorporated within a minimum 10m dark corridor along its entire length. Management of the buffer post development must be detailed in the BP or Ecology report(s).

2.24. The long-term management of hedges; their associated buffers and other ecological features such as ponds and woodlands must be addressed and included within management plans detailed within BP or Ecology report(s).

2.25. The management of hedges that are retained in developments but fenced out of gardens must be included in a BP or Ecology report(s) and managed long term as countryside hedges and include prescriptions for any associated protected species.

2.26. Where a Construction Environment Management Plan (CEMP) is required, this must be cross referenced with appropriate detail in the BP or Ecology report(s).

3. Hazel Dormouse

3.1. Developments affecting hedgerows must be subject to an appropriate level of survey for hazel dormouse and take account of the potential for development proposals to change and to establish appropriate buffers at the outset for both construction and operational phases of the development. Appropriate buffers are set out above.

3.2. NET accept the use of footprint tunnels as a survey methodology; please contact NET to discuss cases where this methodology in combination or alone is being proposed.

3.3. Hedges with hazel dormice present must be retained and protected from development both during construction and in perpetuity. Management plans must be provided which might include techniques such as hedge laying and will need to ensure arboreal connectivity it maintained. Additional planting at the hedge base should seek to curtail cat predation where residential development is concerned by allowing the growth of scrub and planting species such as bramble, gorse and where soil conditions allow Butchers broom.

3.4. For hedges and woodland edge habitat with hazel dormice present, buffers during and post construction and their on-going management post construction must be agreed with NET. The habitats / planting within buffers and how they are situated in relation to the development must also be agreed.

4. Hedgehogs

4.1. Where habitat suitable for hedgehogs is present consideration of the need to survey should be discussed in ecology reports. The optimum period to survey for hedgehogs is between May and September when they are active. A licence from Natural England will be required to survey by trapping or taking using an artificial light (such as a torch). A licence is not required for surveys that are limited to searching for field signs; direct observation or presence/likely absence surveys using techniques that do not involve trapping or handling such as footprint tunnels or camera traps. CIEEM has the species-specific survey competencies information sheet - CSS-HEDGEHOG-April-2013.pdf (cieem.net).

4.2. Where suitable habitat is present, precautionary mitigation for hedgehogs must be included for works that have the potential to cause disturbance or harm:

- removal
- dismantling of log and debris piles by hand by an ecologist
- open trenches, pits, ditches, ponds and drains must be covered over or fitted with ramps to allow for escape. Netting must be kept off the ground to avoid entanglement and any slack netting tied up. Rubbish must be kept contained in a designated area to avoid animals becoming trapped in litter.
- provision of refuge such as log piles
- permeable fencing to provide gaps under gates, brick walls and in gravel boards measuring 13cm x 13cm.

4.3. A guide for development can be found on the People's Trust for Endangered Species website: Hedgehogs-and-developers-ZR.pdf (hedgehogstreet.org). A general advice is also available with the NET series of advice and guidance notes.

5. Trees

5.1. Trees must be assessed for their own ecological value, as landscape and for their importance to habitat connectivity and continuity.

5.2. Assessments must include consideration of the level of predicted impact during and post construction and must be included in ecology reports and BPs.

5.3. Ancient semi-natural woodland habitat must have a minimum buffer of 20m (Basingstoke & Deane Borough Council Landscape and Biodiversity SPD).

5.4. Ancient, veteran, and notable trees require special attention in accordance with the NPPF (2021) and British Standard BS. 5837:2012. Ancient and veteran trees are classed as irreplaceable habitats and must be assessed at the earliest possible stage in the design process with the presumption such trees will be retained. Veteran features such as dead wood and cavities provide valuable wildlife habitats for species such as bats, fungi, birds, invertebrates, and lichen.

5.5. Ancient, veteran, and other notable trees are defined by the Ancient Tree Forum. In addition, the VETREE website provides useful information and guidance.

5.6. The ecological consultant will review the arboricultural report and ensure the Tree Protection Plan has addressed ancient, veteran, and notable trees which should almost always be included in Category A3 (high quality, cultural value including conservation). The design, protection and management will ensure their long-term retention.

5.7. Root Protection Zones (RPZs) for ancient, veteran and notable trees will be calculated as an area with a radius 15 times the diameter of the tree at breast height or 5m beyond the crown whichever is the greater (see Ancient woodland, ancient trees and veteran trees: protecting them from development).

5.8. Where appropriate, other trees (not currently ancient, veteran or notable) within the tree populations on site should be highlighted as the future Veteran and Notable trees and provided with appropriate mitigation / RPZs.

5.9. Tree replacement will follow the recommended levels set by the statutory biodiversity metric. The metric should be used to calculate replacement tree numbers for submissions which are exempt from BNG but include tree removal.

5.10. 50% of replacement or new trees will be large canopy trees such as oak, lime and beech.

5.11. Replacement and new tree planting will include a combination of at least 75% British native including smaller canopy trees such as hawthorn, field maple, rowan, whitebeam, silver birch, crab apple, willow and 25% non-native such as fruit trees and sycamore to ensure ecological value and resilience.

5.12. Where the grant of permission for development will result in the loss of a notable, veteran or ancient tree, bespoke compensation must be agreed with Dorset NET.

6. Watercourses and water bodies

6.1. For main rivers a minimum buffer zone of 8m must be provided with a minimum 5m buffer zone provided for non-main rivers, ditches, or ponds. Buffer zones start at the top of the bank not mid-channel. (Basingstoke & Deane Borough Council Landscape and Biodiversity SPD).