Dorset Biodiversity Appraisal Protocol

Natural Environment Team

Guidance for Consultants

Section B – Mitigation

Contents

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) (2019) states**:**

> *'If significant harm 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 176)

1.2. The NPPF also identifies how the planning system should contribute to and enhance the natural and local environment (Paragraph 171), 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 A).

1.3. For the purposes of the Dorset Biodiversity Appraisal Protocol (DBAP) and Dorset Biodiversity Compensation Framework (Section C), the term '*mitigation*' typically refers to measures that reduce and / or minimise impacts within the red line planning application boundary or blue line wider boundary. The term '*compensation*' is used where a residual loss on-site is either addressed by habitat creation outside of the red line planning boundary or blue line ownership boundary, or where this is not possible, through financial compensation.

1.4. Financial compensation is only considered as a last resort when the planning authority is minded to grant permission and a residual loss in biodiversity still remains after the mitigation hierarchy has been applied; avoid, mitigate and 'habitat' compensation.

1.5. Development is expected to avoid sites of high ecological value such as important hedgerows, nationally important Sites of Special Scientific Interest, and Sites of Nature Conservation Interest (Dorset County Wildlife sites).

1.6. 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, as set out in the Dorset Biodiversity Compensation Framework (DBCF).

1.7. Ecological losses and gains must be clearly identified with appropriate mitigation and off-site compensation (first) or financial compensation where there is still a residual loss. This can be presented in a table for any size of development but must be presented in a table for developments of more than five residential or industrial units. Include loss and gain tables and discussion in ecology reports not within Biodiversity Plan (BP) forms or a Landscape and Ecological Management Plan (LEMP). An example Habitat Losses and Gains table is provided in Appendix A.

1.8. 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.

1.9. Mitigation should also consider including alternative habitats of biodiversity value. Enhancement of other areas such community gardens, playing fields, allotments, SUDS, swales, SANGS or other green infrastructure may contribute to mitigation provided they have clearly defined wildlife benefits and contribute to Dorset's ecological network in addition to their primary purpose (in line with the Government's 25-year Environment Plan; Nature Recovery Network and securing net gain). Long-term management of these features will need to be secured. For habitats of low biodiversity value, creation of amenity grassland, gardens, SUDS and green infrastructure count towards mitigation for loss of these habitats but not for semi-improved grassland types.

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

1.11. 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. 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.

1.12. The retention of ecological features and links must be a priority on all projects submitted under the DBAP.

1.13. Mitigation and precautionary measures must be designed into schemes at the earliest opportunity. Applicants must commit to all necessary mitigation measures via an approved BP or LEMP prior to the submission of 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 Planning Liaison Group under the DBAP.

1.15. The planning authority 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 LEMP. 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 LEMP. Applicants must be made aware by consultants that all measures within the BP or LEMP form a condition of their planning permission.

1.16. An appropriate and proportionate level of ecological supervision / Ecological Clerk of Works must be included in BP or LEMP.

1.17. The BP or LEMP must include detail of when the works / measures will be completed.

2. Worst-case scenario mitigation for bats only

2.1. BP or LEMP involving bat roost destruction, or ecologically significant modifications to all bat roosts must be supported by an appropriate level of emergence / re-entry survey according to current guidelines (BCT, 2016). Applicants must be advised that it is always better to have recent survey data in support of their application, rather than to rely on worst-case scenario mitigation planning, and they must plan for summer surveys. Where there is a proven time pressure to submit a planning application which may affect bats, but it is not possible to complete the required surveys, then worst-case scenario submissions may be accepted under the circumstances set out below. Worst-case scenario BP or LEMP will only be accepted for bats and only then with strict adherence to the conditions set out below. Worst-case scenario BP or LEMP will not be accepted for any other species at any time of year.

2.2. Worst-case scenario BP or LEMP will never be accepted where medium, high or very high conservation roosts (i.e. maternity roosts of any species; roosts of rarer species or of two or more species) or where features offering moderate or high potential are identified.

2.3. Worst-case scenario BP or LEMP will not be accepted where evidence of bat has been found; the use of worst-case scenario planning is only to be used where low potential for bats has been identified.

2.4. BP or LEMP with worst-case scenario mitigation must provide for a significant roost and be supported by a strongly reasoned justification statement. All such cases will require a European Protected Species (EPS) Mitigation Licence and therefore will need to subsequently complete the necessary supporting seasonal surveys.

2.5. Worst-case scenario BP or LEMP will only be accepted between October and January.

2.6. Worst-case scenario BP or LEMP will not be accepted for potential hibernation roosts. Appropriate winter survey must be conducted.

2.7. Consultants must make it clear to their clients that worst-case scenario mitigation:

- is optional and intended to reduce unnecessary delays to the determination of planning applications.
- is not a requirement and if client declines the option they will be required to delay their application until the results of further seasonal surveys are known.
- runs the risk of over-mitigation. Best practice survey effort can avoid this to justify the level of mitigation necessary which should be proportionate to the level of impact to the number of bats, the species and their roosting behaviour at the location.
- will require additional surveys for an EPS licence application.
- may require an application to the planning authority for a change in compliance / condition to the original grant of permission and an additional charge for NET review and re-approval if later surveys lead to an amended BP or LEMP.

2.8 Refer to Section A for information about worst-case scenario BP or LEMP for bats and the granting of a Natural England EPS Mitigation Licence.

3. Hedgerows

3.1. As linear features hedges make a unique contribution to biodiversity. Assessment must take into account length, distinctiveness and condition and spatial relationship as well as their landscape or historic value and protected species interests.

3.2. The distinctiveness of hedgerows must be assessed using the wildlife and landscape criteria set out within the Hedgerow Regulations (1997) to identify 'important' hedges. These criteria take into account species composition, woody and woodland species, standard trees and another habitat features such as a bank or wall.

3.3. Hedgerows qualifying as 'important' under the Regulations will be viewed in the same way as a Site of Nature Conservation Interest (SNCI) and proposals to remove them or sections of them will not be not accepted under the DBAP. This accords with the mitigation hierarchy (see 1.1 above) by seeking to avoid impacts rather than attempting to mitigate them.

3.4. For the purposes of the DBAP hedgerows are divided into:

- important hedges.
- species-rich hedges typically comprising five or more native woody species within an average 30m length. NB: this category may also apply to the hedges which may have fewer woody species but have a rich basal herbaceous flora.
- species-poor hedges which may also include those with exotics / non-natives present.

3.5. '*Condition*' must be assessed with reference to the following attributes which must be detailed within an ecology report:

- height
- width
- gap hedge base
- length and frequency of gaps within hedge
- invasive species
- damage

3.6. The Hedgerow Survey Handbook (Defra, 2011) is recommended reading for more detailed guidance.

3.5. 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.

3.6. Developments affecting hedgerows must be subject to adequate survey for protected species including activity surveys for bats and surveys for Hazel dormouse. 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 of the hedge is not planned. This is to take account of the potential for development proposals to change and to establish appropriate buffers - for both during and post construction - at the outset.

3.7. Where replacement planting is required as mitigation, the length of the replacement hedgerow will be calculated using the multipliers set out in the Dorset Biodiversity Compensation Framework (refer to Section C).

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

3.9. Limited gap filling, and improved management alone will not qualify as mitigation for hedgerow loss and will be considered as 'enhancement' contributing to securing biodiversity net gain rather than as mitigation.

3.10. 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 in accordance with the DBCF multipliers.

3.11. Hedges bounding green lanes and double hedges must be treated as two hedges and not a single hedge.

3.12. A hedge with more than 90% non-native species comprising its structure, will not be regarded as a hedgerow for the purposes of compensation. Mitigation, however, will still need to be applied as for example it may be used as a navigational feature by bats.

3.13. Residual loss of hedgerows will be compensated under the DBCF (see Section C).

3.14. Where trees are present within the hedge line the Root Protection Zone must be increased as per BS 5837:2012. See 4.7 below for veteran trees.

3.15. 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.

3.16. 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.

3.17. 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.

3.18. Hedges within development sites must be subject to a 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).

3.19. Hedgerows with protected species interests will also require a buffer during and post construction and this must be agreed with the NET. Management of the buffer post development must be detailed in the BP or LEMP. Refer to Hazel Dormouse; 3.25 - 3.28 below.

3.20. 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 LEMP.

3.21. The management of hedges that are retained in developments but fenced out of gardens must be included in a BP or LEMP and managed long term as countryside hedges.

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

Hazel dormouse

3.25. Developments affecting hedgerows must be subject to adequate survey for Hazel dormouse and take account of the potential for development proposals to change and to establish appropriate buffers - for both during and post construction - at the outset (see point 3.8 above).

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

3.27. 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.

3.28. 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 the NET. The habitats / planting within buffers and how they are situated in relation to the development must also be agreed.

NB. This section will be expanded and updated when conservation and mitigation guidelines for the species is published.

4. Trees

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

4.2. Assessments must include consideration of the level of predicted impact during and post construction and must be included in ecology reports and BP or LEMP.

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

4.4. Ancient, veteran and notable trees require special attention in accordance with the NPPF (2019) 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.

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

4.6. 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.

4.7. Root Protection Zones (RPZ) 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).

4.8. 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.

4.9. Tree replacement / financial compensation will follow the recommended levels set by Bristol City Council (listed in the Planning Obligations Supplementary Planning Document 2012). Where trees will be felled for development, replacement will be dependent upon the size of the trees to be lost and in accordance with the following table:

Trunk diameter of tree lost to development (cm measured at 1.5m above ground level) [1]	**No. of replacement trees required (all replacement trees must be 16-18cm girth)**
Less than 19.9	1
20 - 29.9	2
30 - 39.9	3
40 – 49.9	4
50 – 59.9	5
60 – 69.9	6
70 – 79.9	7
80 +	8

1 With the exception of notable, veteran or ancient trees.

4.10. 50% of replacement or new trees will be large canopy trees such as oak, lime and beech.

4.11. 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.

4.12. Where the grant of permission for development will result in the loss of a notable, veteran or ancient tree, the level of compensation tree planting required on-site will be calculated in accordance with recognised methodology Capital Asset Value Amenity trees (CAVAT).

4.13. If tree replacement cannot be secured on-site then CAVAT or a bespoke approach appropriate to the site taking into account species and the position of planting, will be used to determine the level of financial compensation required.

5. Watercourses and water bodies

5.1. 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).