

ROUGHMOOR LANE PLANNING PROPOSALS

BIODIVERSITY NET GAIN.

Background.

The Village approach to biodiversity.

122 out of 173 village survey respondents ranked the impact on wildlife as 'very important'. 20 specific written and many spoken submissions have all stressed that Westbury-sub-Mendip is a *very* environmentally and ecologically aware conservation-minded community. This is important to emphasise so that the impact of these proposals can be put into the correct Parish and village context. The evidence for this can be listed:

a) There are at least 5 privately owned parcels of land and a village group Conservation Trust owning some 15 hectares in total all within the Parish, all managed solely for wildlife, biodiversity and bioabundance. There are farms in Stewardship Schemes and a number of gardens that are managed in part for high biodiversity.

b) There is a long-term survey in place to monitor glow worms which is now in its 15th year, providing an robust dataset and adding weight to the importance of the Parish Council's dark skies policy.

c) There is significant provision of nest boxes for swifts with at least 9 houses involved and 19 nestboxes for owls and other species, notably kestrels. Bat boxes have been installed widely across the Parish and are monitored for use.

d) There is a village Whatsapp Wildlife Group with 59 households participating. Records, photographs, observations and questions are pooled and shared, providing a growing data set and nurturing participants' interests and enthusiasms.

e) A thriving and productive village Tree Group has established a nursery to provide good numbers of many locally sourced native species primarily for replanting initiatives as a consequence of Ash Dieback.

Biodiversity and Ecological Networks.

Mendip District Local Plan Part 1: Strategy and Policies 2006-2029 Development Policy 5: Biodiversity and Ecological Networks can be found at https://www.mendip.gov.uk/media/9073/Adopted-Local-Plan-2014/pdf/Adopted_Local_Plan_2014_with_erratum_note.pdf?m=635687489961600000.

Sections 6.38-6.42 are especially relevant for the emphasis placed on the problems associated with habitat fragmentation and the requirement to make corridor linkages between fragments, one of the three Lawton Principles which underpin the whole approach to wildlife conservation in the UK.

DP5 is summarised as follows:

DP5: Biodiversity and Ecological Networks

The Council will use the local planning process to protect, enhance and restore Somerset's Ecological Network within Mendip.

1. All development proposals must ensure the protection, conservation and, where possible, enhancement of internationally, nationally or locally designated natural habitat areas and species.

2. Proposals with the potential to cause adverse impacts on protected and/or priority sites, species or habitats are unlikely to be sustainable and will be resisted.

Exceptions will only be made where:

a) the impacts cannot be reasonably avoided,

b) offsetting/compensation for the impacts can be secured,

c) other considerations of public interest clearly outweigh the impacts, in line with relevant legislation.

Offsets as mitigation or compensation required under criterion b) will be calculated using Somerset County Council's Biodiversity Offsetting methodology.

Biodiversity Net Gain

The village community is expecting Biodiversity Net Gain to be achieved in good faith with no reductions, moving targets or minimalist philosophy. This should be seen as a major opportunity to deliver. Much environmental good work and good practice is already underway in the community and it expects these proposals to complement and enhance rather than detract from these important endeavours.

It is noted that Biodiversity Net Gain means what it says, that there should be a greater amount and a greater variety of wildlife compared with the current situation. The proposals will change the nature of the natural community and the required net gain will be achieved if it is replaced by something better. It is assumed that Natural England's Biodiversity Metric 3 or similar will be used to make the necessary measurements to confirm that this has been achieved. Biodiversity Net Gain must be delivered otherwise there will be a breach of Mendip policy and the proposal fails on this crucial criterion.

These proposals have the potential, if the opportunities are taken, to make a really significant impact in the way housing can be built and lead the way for real Biodiversity Net Gains for the village, Parish and District.

Ecological Report

The ecological report to the Church Commissioners has not been included in the submitted proposals which is unfortunate as it would have provided the baseline for Biodiversity Net Gain.

Bat Corridor.

Mendip has three internationally important Natura 2000 sites, one of which is The North Somerset and Mendip Bats Special Area of Conservation, also referred to in Mendip District's DP5 (link above).

Mendip Bat Species Action Plan can be found at https://www.mendip.gov.uk/media/965/Mendip-Bat-SAP/pdf/Mendip_Bat_SAP.pdf?m=635005950481000000 . This outlines national and international responsibilities with regard to bat conservation. It commits Mendip District Council to '(ensuring) that all planning applications potentially affecting bat roosts, foraging habitat and flight lines have an appropriate survey, and mitigation and enhancement if appropriate, before planning permission is given'.

It is reassuring to see that the proposal recognises the importance of bat corridors in line with Policy WM1 of the North Somerset and Mendip SAC, making specific mention of Greater Horseshoe Bats. In addition, the village has known roosts of Lesser Horseshoe Bats and known foraging roosts of both species. Barbastelle has been reported by at least two village bat recorders. The two Horseshoe species and both Long-eared species* are short-range echolocators and this has two consequences: first they are harder to detect in routine bat echolocation surveys so estimates based on recordings are very likely to be too low and they are almost wholly reliant on landscape features to navigate. All five species are known to be light adverse. They require dark, linear landscape features of some substance and bulk to enable navigation out into the wider countryside and their foraging areas.

Footnote.

*Roosts of the particularly rare Grey Long-eared Bat have been found very recently in North Somerset.

It is imperative that bat corridors function as they are intended. The footpath along the northern boundary should resemble the path shown in the photograph below. This is flanked on both sides by a wildflower verge and bordered by a mixed hedge of native species including 8 to 10 standard trees. The trees should be relatively small species to avoid blocking views from existing housing, but significant enough to provide screening. In total, this should be at least 15m wide, the central part of which would be the tarmac or paved path. For proper functionality, on-going management is key and outline details of that are needed to inform these design criteria from the outset so that a hedgerow is not planted that cannot be managed in a favourable way. Hence, to maximise effectiveness and value for other wildlife, it is important that the mowing of the wildflower verges is done late in the season and, once the hedges are established, the trimming should be undertaken no more frequently than every three years. In addition, only one of the hedges should be trimmed in any one year, so there is always one that has enough height and substance to act satisfactorily as the corridor it is intended to be. The hedges and verges, planned and planted at the outset as described, will be of sufficient height and width once established to enable this to happen on an on-going basis.



A good quality double hedge with verges and footpath showing what the northern boundary bat corridor should be. These are high biodiversity native species hedges with wildflower verges, mowed each side at different times, trimmed each side in different years.

There is no footpath included in the proposal along the west boundary. A path giving access to the Playing Field at the south corner and linking to the Strawberry Line Multi-user path should be installed with a single hedge with wildflower verge planted about 8m wide. The same management criteria apply, with only part of the hedge cut at each trimming. With trees growing at intervals just over the boundary on the Playing Field, this will form the 'hedge with standards' style of hedge that is particularly favourable for Biodiversity Net Gain. This should look like one side of the photograph above.

All five important bat species mentioned are known to be very light adverse. There is a very significantly reduced advantage in having these important hedgerow features if the built area is lit. Similarly, nearly all nocturnal insects and especially glow worms are adversely affected by light. In line with the Parish Council dark skies policy, there should be no lighting.

Research confirms that hedges and verges of this description will add significantly to invertebrate biomass and biodiversity and be especially important for this known population of glow worms, the subject of an on-going Parish survey project, now in its fifteenth year. Hedgerow-dependent birds and small mammals will also be beneficiaries.

Research relating to the style and management of hedges to act as effective bat corridors can be found (for example) in the British Ecological Society's *Journal of Applied Ecology* at <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.13412> .

Assuming that the length of the north hedge is reduced by the land used to create the new road junction and that the Community Use Area is relocated to the east side altogether, the total area of hedges and verges as described is close to 2,500 m². The nature of the works proposed are such that Biodiversity Net Gain can only be properly delivered by dedicated land area. Meeting the *minimum* target of the Government's Environment Bill of 10% Biodiversity Net Gain and its aspiration 'to leave the environment in a better state than we found it' is essential and any less than this falls short and, with regard to bats, puts the proposal in breach of the Mendip policy.

Attenuation Pond.

The proposals state that all development will be restricted to within the red boundary on the drawing. It is not clear what the green boundary signifies - indeed the Church Commissioners weren't clear either, describing it as a 'typo' in the zoom meeting of 20th January 2022. As there is no clear explanation on this point, it is assumed that the attenuation pond will be moved to within the red boundary in line with the proposal that works will be restricted to within the red line.

Wherever the attenuation pond is located there is considerable opportunity to make it a significant wildlife habitat and still retain its functionality. It should be very much more than just a hole in the ground. All research points to a pond which retains shallow water in all but the driest of conditions, has a substrate in which plants can grow and is planted in and around by native pond plants, marginal plants and some small native trees like willow which can withstand severe pruning as and when required is by far the favoured installation.

It is noted that the local area is an important one for colonies of Great Crested Newts, a UK Biodiversity Action Plan species and the subject of on-going local environmental projects to aid expansion and linking of metapopulations.

There are numerous references that list favourable construction and management criteria. I attach one: https://www.susdrain.org/files/resources/other-guidance/ecological_benefits_summary.pdf



Developing attenuation pond serving newly built houses, fully functional for its intended purpose but already highly biodiverse.

Trees and Shrubs.

The proposal shows planting of trees and shrubs among and between the buildings. Planting should be sensitive to the views from the site, the views through the site from adjacent housing and the view of the site from the scarp of the Mendip AONB which values its far-reaching vistas as a significant and much cherished aspect. Positioning of trees and shrubs should be planned where appropriate to contribute to screening without detriment to these views and sight-lines. It may be that native species are not always appropriate for these purposes and thought needs to be given to species-selection to provide the desired function as well as a contribution to biodiversity. In principle, locally sourced native species should be chosen wherever practical.

Buildings and gardens to offer valuable habitats.

The buildings should be *required* to include swift nestboxes within the construction. Swifts are a newly red-listed species and there are active initiatives in the village to enable nesting in houses. There are significant populations developing centred on Old Ditch and The Square. The opportunity to extend the village colonies to the new constructions should not be missed.

Similar provision should be incorporated for bats and invertebrates within the structure of the buildings and links between gardens for hedgehogs.

It is cheering to see that elsewhere in UK such provision has been made a *requirement* of all new planning of buildings above 5m. A reference to this enlightened approach from Brighton is at <https://www.brighton-hove.gov.uk/sites/default/files/2021-05/OD13%20Special%20Guidance%20A%20Swift%20Boxes%20and%20Bricks.pdf>



Swift exiting a 'Swift Brick' nest brick that is built into the wall of a building elsewhere in the village.

Simon Reece

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