5E Nature Recovery

Evidence

5.55 The SDNPA commissioned ecology work to provide information about the biodiversity of the site to inform the preparation of the AAP. In 2018, a Preliminary Ecological Appraisal[21] (PEA) and Preliminary Roost Assessment[22] (PRA) (for bats) were undertaken. In 2021, the SDNPA commissioned WSP to provide an update[23] to the PEA with the addition of an Ecological Constraints and Opportunities exercise and a Baseline Habitat Value Assessment for Biodiversity Net Gain (BNG). A further survey will be undertaken in summer 2022 to support the condition assessment information in the BNG baseline. They also undertook a PRA[24] of the Cliffs. A bat activity survey will be undertaken during the spring/summer of 2022.

5.56 The PEA has identified habitats of ecological value including Open Mosaic Habitat (OMH) (consisting of moss, ruderal vegetation and ephemeral pools), calcareous grassland, woodland and the cliff faces. The areas of bare ground / exposed chalk have the potential to become OMH, which is a Habitat of Principle Importance under the Natural Environment and Rural Communities (NERC) Act 2006. The PEA also identified suitable habitat for a range of protected species. This includes roosting, commuting and foraging habitat for bats, scrub and woodland habitat suitable for badger, dormouse and hedgehog, and a range of habitats, notably OMH, for basking, shelter and foraging opportunities for reptiles. Many habitats present are also suitable for bird species. Notably the cliff faces and the post-industrial structure of the cement works provides nesting opportunities for a number of charismatic species such as peregrine falcons and black restarts, both of which are listed on Schedule 1 of the Wildlife and Countryside Act.

Wharram Quarry Nature Reserve: a former chalk quarry that has been transformed into a floristically and invertebrate rich chalk grassland. (Credit: Tom Marshall/ Yorkshire Wildlife Trust)

5.57 The PRA identified that all the cliffs had some suitability for bat roosting, with one cliff face having particularly high suitability and a further six have moderate suitability. These cliff faces were solid cliff faces, relatively unexposed, occasional to numerous

[21] Preliminary Ecological Appraisal for Shoreham Cement Works, The Ecology Consultancy, 2018

[22] Preliminary Roost Assessment, The Ecology Consultancy, 2018

[23] Preliminary Ecological Appraisal for Shoreham Cement Works, WSP, 2022

[24] Preliminary Roost Assessment, WSP, 2022

crevice or void features, suitable amount and type of vegetation cover, and generally set back from disturbance activity on the site.

Issues

5.58 As recognised in the State of Nature Report 2019[25] and the Government's 25 Year Environment Plan[26], biodiversity is declining. The trends of nature depletion are alarming and represents a biodiversity emergency akin and related to the climate change emergency. Nature recovery is a priority for the SDNPA. Conserving and enhancing wildlife is enshrined in the first purpose of the National Park.

5.59 The Government has committed to making a minimum of 10% BNG a legally mandatory requirement of planning permission through the Environment Act 2021. There is currently a transition period for the Government to prepare supporting regulations and guidance. It is expected that BNG will be a legal requirement for planning permissions from November 2023. The Local Plan includes policy SD9 (1)(b) which requires development proposals to identify and incorporate opportunities for net gains for biodiversity. The BNG Technical Advice Note[27] sets out how BNG is to be achieved in the SDNP in accordance with SDLP policy during this interim period.

5.60 The evidence has identified high value habitats and important species are present in many locations across the site. It is likely to be challenging to make provision for development to support a viable scheme whilst seeking to avoid and mitigate any harm, and enhancing biodiversity contributing to nature recovery. BNG should be integrated into the new development from the beginning with new buildings, green roofs and green walls and landscape treatment offering enhanced biodiversity opportunity. More details about how this affects each area of the site is set out in the next section.

5.61 A related challenge is achieving BNG on a site with highly distinctiveness habitat. The majority of this is the cliff faces and scrub atop the cliffs. Despite the relative low extent, OMH and calcareous grassland make notable contributions to the BNG baseline. Conserving and enhancing these areas are key considerations to achieving BNG. Utilising development structures to support nature via green roofs and green walls may make a useful

Betchworth Quarry: a former limestone quarry that has been restored to regenerate chalk grassland and deciduous woodland. (Credit: Ian Capper)

[25] State of Nature Report, 2019
[26] A Green Future: Our 25 Year Plan to Improve the Environment
[27] Biodiversity Net Gain Technical Advice Notre, SDNPA, 2022

contribution to BNG for the site, but there is potential tension with provision of solar panels for green energy generation.

5.62 The unique OMH present, and opportunities for enhancement, have been facilitated by the particular use of the site. The activity has, in a cyclical manner, exposed the chalk and allowed the early succession species to establish when the disturbance has ceased. This cyclical or periodic disturbance creates the unique habitat structure and value for nature. Retaining, enhancing and/or creating more of this type of habitat would support celebration of the scar, the history of the site. However, the appropriate use of the site and management would be an important consideration in how such a celebration could be achieved. Such consideration include implications of access, recreational disturbance and lighting.

How the issues affect five areas

5.63 The evidence shows that the **Riverside** is the area with the least high value habitat and therefore has most potential for accommodating development. It is noted that the **Riverside** may offer opportunities to enhance the riparian corridor of the Adur. Some habitat of value is noted along the road corridor, which is a consideration for access of the site.

5.64 In the **Cement Works** area, there are mix of habitats including areas of chalk grassland and woodland. Some of this habitat is located close to the entrance of the site, which is a consideration for access of the site. The **Clifflands** to the south of this area has moderate value for bat roosting and could be affected by change in conditions and use of land next to the cliff. The **Cement Works** buildings have value for bats and birds. The biodiversity value will need to be considered and addressed as part of demolition or reuse of the buildings, including any mitigation that may be required.

Betchworth Quarry: a former lime kiln, which has been retained to become a habitat for bats. (Credit: Hugh Craddock)

5.65 The **Bowl** contains a significant area of OMH in the north/north west of this area. Important opportunities for enhancement and habitat creation have been identified in the north/east of this area. The **Clifflands** on the north / northeast inner section of the **Bowl** has been identified as particularly significant for bat roost suitability. This is adjacent to the OMH and enhancement area noted above which suggests this is a sensitive area and area of opportunity. If habitat is retained and, creation and enhancement opportunities for this area are pursued, careful consideration will need to be given to suitable compatible uses to support management of the habitat; some disturbance may be acceptable but this must be carefully managed.

5.66 The **Moonscape** area has high potential for habitat enhancement and creation. The bare ground / exposed chalk of this section has potential to become OMH. The **Clifflands** at the eastern side of this area are noted for peregrines. There is an area of currently grazed grassland habitat on the edge of the site and adjacent to Mill Hill shown to be of limited value for biodiversity at present. If habitat creation and enhancement opportunities for this area are pursued, careful consideration will need to be given to suitable compatible uses to support management of the habitat; some disturbance may be acceptable but this must be carefully managed.

5.67 All of the **Clifflands** have cliff faces with some suitability for bats. The northern inner section of the Bowl has been identified as having the highest suitability. The eastern cliffs have been noted for peregrines. The cliff tops have also been identified their scrub and chalk grassland habitats which supported a range of protected species, including providing potential commuting corridors. These have been subject to minimal disturbance being set back from recent and current activity and so new development will need to consider this, including sensitive lighting.

Options

5.68 There are a number of options arising from the nature recovery evidence:

- It needs to be considered how much of a priority nature recovery should be as part of the redevelopment of the site. The extent and intensity of development could have an adverse impact on sensitive habitats and protected species.
- The five areas of the site offer different opportunities for nature recovery, for example, the **Riverside** could be conserved and enhanced as a riparian corridor linking with other habitats down and up stream.

Question 11: In which area(s) of the site should the focus be for biodiversity protection, enhancement and creation?

Question 12: Should buildings and structures contribute to nature via green roofs and walls or should these surfaces support solar energy or a mixture?