Appendix 2 – International Conservation Sites and Between

The River Avon and The New Forest international nature conservation sites are designated with different qualifying features (River Avon/Avon Valley SAC & SPA – qualifying features include Atlantic salmon, sea lamprey, bullhead and Bewick's Swan³⁹; the New Forest SPA – qualifying features include woodlark, nightjar and Dartford Warbler⁴⁰). At first glance, it would appear that connecting these two areas by a wildlife corridor would have little benefit. However, this is not the case. There are a number of species that require both habitats to survive and thrive. For example, nightjar are known to roost in New Forest heathland areas but hunt for insects in the Avon Valley⁴¹. There are also areas beyond the river that have complementary habitats in the New Forest, like the Dorset heathland areas. Making connectivity easier will aid mixing of populations and improve genetic diversity⁴².

Biodiversity is known to have reduced in recent times within The New Forest SSSI⁴³, despite the area being known for its outstanding richness and the best endeavours recently of the New Forest National Park Authority⁴⁴. In lowland heathland, for example, the presence and numbers of characteristic birds, reptiles, invertebrates, vascular plants, bryophytes and lichens are important indicators of habitat quality⁴⁵. Some species have declined markedly, and others disappeared completely. One recent example is the pine marten, a species found across England just a century ago, thought to be extinct until a small group was rediscovered in The New Forest a few years ago⁴⁶. Another species, the New Forest cicada, populated areas between heathland and woodland. It had a very distinctive call, which has not been reported to have been heard for over a decade. In 2018, an extensive survey was undertaken at key sites in the New Forest, but found no signs of the cicada⁴⁷. In the Avon Valley, as stated above, a qualifying feature for designation was the presence of Bewick's swans⁴⁸. In recent years, their numbers have dwindled to the point that they now appear to be absent. The same decline has been observed with water voles, but the cause of their demise was the release of mink. Recently, water voles have been reintroduced⁴⁹.

Nature Is a complex thing and planning for nature conservation requires consideration of resilience and spatial networks. Resilience is becoming increasing important as the effects of climate change start to stress ecological systems⁵⁰. The well-established spatial network concepts of 'Better, Bigger, More and Joined' was extolled in the influential 'Making Space for Nature' report⁵¹ by John Lawton et al. It is known that species exhibit inter-connected dynamics over large areas - metapopulation theory has been influential in applied ecology and conservation for decades⁵². The actions proposed in the policies herein are small but are aimed at increasing resilience by increasing connectivity (the Lawton 'Joined' concept). In order to increase network resilience, new habitat needs to be created, but this can be modest yet still effective⁵³.

As this report identifies new areas of protection for connectivity purposes, it is expected that there will not be extensive studies available on the presence of species protected and studied in the SSSI areas. There is limited information on bat species and numbers in the putative corridor areas⁵⁴ except for the testimony of local residents that indicate a recent decline in the putative northern corridor. Likewise a decade or so ago, nightingales and nightjar were frequently observed in the northern corridor area, but not in recent years⁵⁵.

Likewise for butterflies - there are no transects known to have taken place in the corridor areas⁵⁶.

What is known is that an area of Ringwood Town Council land (Poulner Lakes) had around two thousand five hundred saplings planted by a local charity in 2020 which connected wooded areas adjoining the Lin Stream with copses further south. A wide variety of native species and some fruit trees increased the biodiversity of trees in the area and grounds were enhanced with patches of wildflower planting. Transepts carried out over the last few years evidence an increase in the variety of flora and the variety and quantity of invertebrates⁵⁷. These findings have been provided to HBIC.

Further north and just outside the parish, extensive conservation and enhancement work by HIoWWT has led to increases in the range and number of many species, including nightjar and bats of many kinds⁵⁸.

Hedgerows are known to be important for wildlife connectivity and have numerous other ecological benefits⁵⁹. Many creatures use hedgerows to aid navigation, to provide food or simply to hide from predators. A thin 'wild' strip of land between hedgerows and arable land encourages the presence of pollinators and hence aids certain arable farming.

The health of hedgerows can be assessed using various criteria⁶⁰. The intention of the policy direction outlined in this report is to protect and enhance the hedgerow network in the key corridor areas. To achieve this aim, the condition of the existing hedgerow network will be ascertained with permission of landowners⁶¹. The results of this work will be provided to HBIC.