



Wood White

Leptidea sinapis

Species Action Plan

1. Introduction

The dramatic population decline of the wood white butterfly within the UK in the last 100 years makes it a high conservation priority.

2. Current Status

2.1 Ecology and habitat requirements

The wood white is the smallest of the White family of butterflies. It is renowned as the most delicate of the British butterflies and this has given it the evocative name. It is usually encountered in sheltered situations such as woodland rides and clearings and scrub edges. The wood white can also breed on coastal undercliffs, disused railway lines and around rough overgrown field edges. In Worcestershire the known breeding sites are all in woodland.

In Britain the wood white traditionally bred in ancient deciduous woodland that had a long history of coppicing. The number of wood white colonies rapidly declined in size and number as traditional coppicing ceased at most woodland sites. In the second half of the twentieth century

as it moved to colonise a wider range of habitats including young conifer plantations planted on clear felled ancient woodland sites and disused railway lines following closure. Unfortunately the conifer plantations grew rapidly and disused railway lines soon scrubbed up causing a further round of extinctions. The butterfly favours breeding in wide, flower-rich, sunny but sheltered open rides and glades or recent coppice areas that are lightly shaded by the surrounding trees. Colonies tend to be concentrated in rides running between young crops or young coppice plots. Areas of recent clear-fell are also important whilst the habitat remains open.

The growth structure of the known larval food plants is the critical factor in the distribution of the wood white. These include meadow vetchling (*Lathyrus pratensis*), tufted vetch (*Vicia cracca*), bitter vetch (*Lathyrus linifolius*), common bird's-foot-trefoil (*Lotus corniculatus*) and greater bird's-foot-trefoil (*L. pedunculatus*). For any of these foodplants to be used they must grow through and protrude above the surrounding vegetation and in less than 50% shade conditions.

2.2 Population and distribution

The wood white butterfly is confined to the southern half of the UK with a very localised distribution. It has declined substantially during the 20th century due mainly to the decline in traditional woodland management. By the late 19th century it was extinct in several UK counties, including several where it had once been abundant. In 2008 there were approximately 50 colonies left in England. The three main regions: Herefordshire and South Shropshire; Northamptonshire; and Devon.

National Status

The national distribution trend for the species from 1976 to 2014 shows a change in occurrence of -89% and change in abundance of -88%. Data from 2005 to 2014 shows a continuing decline in occurrence and abundance, albeit less steep, by -25% and -18% respectively (Fox *et al.*, 2015).

Regional Status

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Regional Action Plan. The species continues to have a national stronghold in the region even though it is still undergoing decline in some areas. It was recorded in 56 regional tetrads between 1995 and 2003. It is usually associated with woodland habitats where it breeds in open rides and clearings. It has declined severely due to the decline of traditional woodland management. Where conservation work has been undertaken (widening of rides, coppicing, establishing mowing rotations etc), it has responded positively (Joy, unpub.).

Worcestershire Status

The wood white was recorded in 9 tetrads between 1995 and 2002. Most colonies were small and in the west of the county. Formerly, a colony also occurred at Little Goosehill Wood, part of the Forest of Feckenham, but this had died out by the late

occasional records in Worcestershire from time to time (Joy, 2002). By 2018 confirmed breeding populations of wood white were known only from Monkwood (following two phases of reintroductions) and one privately owned site where the population size is unknown (figure 1).

2.3 Legislation

The butterfly is listed in schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

2.4 Summary of important sites

The Wyre Forest

All records of the wood white are from the Dowles Brook corridor and Postensplain areas of the Wyre Forest. There are 21 records for the Dowles Brook corridor, but unfortunately none since 1992, so it appears to have disappeared from this area. At Postensplain, it was recorded regularly with 13 records since 2002, particularly along the stream. The largest recent count was 20 in 2005. A small population persists in this area and annual work parties are held to try to maintain the colony. There is one record from Areley Wood in 1994 (Grundy, 2006).

Monkwood

Despite targeted management the wood white was lost from this site in 2008. Following habitat suitability assessments in 2014 and 2015 adult wood white butterflies were reintroduced in 2016 and again in 2017 as part of the HLF-funded Butterfly Conservation project 'Making a Stand for the Wood White'. Two butterfly survey transects have been established covering all of Monkwood and part of Monkwood Green. During 2018 adult wood white butterflies were seen in good numbers, with females egg-laying in Little Monkwood as well as in the main wood.

3. Current Factors Affecting the Species

Lack of traditional coppice management. Coppice plots connected by wide rides allow light into woodlands, encourage the growth of suitable food plants and assist movement of the wood white from one potential breeding site to another. Recent coppice plots connected by wide rides provide good areas of habitat. However, plots that are deer fenced do not appear to support wood white habitat on a long-term basis, especially if re-growth has been vigorous.

Isolation of existing suitable woods. Increasing the permeability of the landscape by creating flower-rich verges, field margins or similar linear habitats and managing them sympathetically may help the wood white to colonise new sites in good years.

Continuing decline in the mar 20

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