Fixed Point Photography in Wyre, 2018 and 2020

ROSEMARY WINNALL

BACK TO ORANGE (BtoO) was one of 18 projects undertaken during GROW WITH WYRE, a £4 million Heritage Lottery-supported Landscape Partnership Scheme led by the Forestry Commission between 2008 and 2012. BtoO, with extra funding from SITA Trust, aimed to increase understanding about the lives of some of our butterflies and moths and undertake appropriate woodland management to sustain and increase populations. The orange Pearl-bordered Fritillary *Boloria euphrosyne*, already extinct in many woodlands to the east of the Wyre Forest and decreasing here, provided a focus for this project.

During the 1990s the government had decreed that plantations of non-native trees on ancient woodland sites (PAWS) were to be removed and native trees allowed to flourish to enhance biodiversity. This had already started in Wyre and post clearance these areas were either being replanted with a range of broad-leaved tree species or left to allow natural regeneration. We wanted to know how this might benefit some of our butterflies and moths, Dr Jenny Joy from Butterfly Conservation helped to design the study to find out what difference this would make to the ground vegetation, and Lepidoptera. Fieldwork was undertaken in 2008 and repeated in 2010.

In 2008 eight experimental plots were set up, by the author, from which the conifers were to be removed, and two control plots which were to remain untouched, one with conifers and the other with broad-leaved trees. The ground vegetation survey was conducted using ten 2 m x 2 m quadrats along a central transect in each plot. Data collected showed % cover for each vascular plant species using a DOMIN score, plus information about the substrate including the amount of bare ground, leaf litter, brash, lichen and bryophyte cover. Vegetation height, tree density and light readings were also recorded. In addition, records of butterflies and day-flying moths were noted using timed counts on sunny days twice a month in May, June and July. The study was repeated post conifer removal in 2010.

Fixed point photography was used to record changes before (2008) and after (2010) conifer removal. Figures 1 and 2 show the effect of conifer removal in Plot 7 in Longdon Wood. There is a noticeable difference in both ground flora and canopy over the two years.

In Plot 4 in Longdon Orchard shown here in Figures 3, 4, 5, 6, a diverse ground vegetation soon developed from bare ground covered with conifer needles. The plants included a range of good nectaring plants for fritillaries such as Wood Spurge *Euphorbia amygdaloides*, Bugle *Ajuga reptans* and thistles, plus many violet *Viola* sp. plants on which these butterflies lay their eggs. 2010 Lepidoptera counts included good numbers of Pearl-bordered Fritillaries, Silver-washed Fritillaries *Argynnis paphia*, Dingy Skippers *Erynnis tages* and Drab Looper *MInoa murinata* moths. It was of interest to see how quickly the land colonised with plants and insects after conifer removal, and how good habitat developed for a range of butterflies and moths including the Pearl-bordered Fritillary!

More details can be obtained in the following reports held in the Wyre Forest Study Group's Record Room:

- Grow With Wyre PAWS Lepidoptera Research Programme: Vegetation, Butterfly and Day-flying Moths 2008. Project 1F: Back to Orange. Rosemary Winnall
- Grow With Wyre PAWS Lepidoptera Research Programme: Vegetation, Butterfly and Day-flying Moths 2010. Project 1F: Back to Orange. Rosemary Winnall

Fixed point photography is an excellent way of recording habitat change over time, and hopefully it will be used more frequently in Wyre in the future.

This article is an extract from the Wyre Forest Study Group annual Review 2023



Figure 1. Plot 7 Longdon Wood June 2008 Rosemary Winnall



Figure 2. Plot 7 Longdon Wood June 2010 Rosemary Winnall



Figure 3. Plot 4 Longdon Orchard looking South June 2008 Rosemary Winnall



Figure 4. Plot 4 Longdon Orchard looking South June 2010 Rosemary Winnall



Figure 5. Plot 4 Longdon Orchard looking North June 2008 Rosemary Winnall



Figure 6. Plot 4 Longdon Orchard looking North June 2010 Rosemary Winnall