



Newsletter reporting on work to conserve Lepidoptera on Forestry Commission Land in England.

Foreword

Welcome to the seventh edition of "Speckled Wood", an email newsletter produced by Butterfly Conservation and Forestry Commission England (FCE) about the conservation work to benefit threatened butterflies and moths on priority sites on FCE land. In this issue we report on a project to create disturbance to benefit butterflies and moths in the Brecks and on a project to benefit the Barberry Carpet in Dorset. Details of factsheets about threatened butterflies and moths and Butterfly Conservation events can be found on page 4.

Disturbance is key to Grey Carpet success

Sharon Hearle, East of England Regional Officer, Butterfly Conservation.
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In the East of England Butterfly Conservation has been working with Forestry Commission England to create bare ground plots along Forest rides in the Brecks of Norfolk and Suffolk to improve habitat for butterflies and moths. The presence of bare ground and early successional habitats is an important feature of heathlands and dry grasslands and vital for many scarce moths such as Grey Carpet and Marbled Clover and butterflies including Dingy Skipper and Grizzled Skipper. Grey Carpet, Dingy Skipper and Grizzled Skipper are priority species in the UK Biodiversity Action Plan (BAP).

The establishment of conifer plantation on previously open Breckland heathlands has removed much of the suitable habitat. In recent years management by mowing and sheep grazing combined with some very wet summers has contributed to a decline in bare ground on Breckland grass heath sites and forest rides.

With funding from SITA Trust, Butterfly Conservation has been able to create over 60 bare ground plots using a range of techniques. This project was successfully completed in December 2009 and demonstrated that it is possible to create suitable habitat for Grey Carpet on forest rides by creating bare ground. The Grey Carpet moth is restricted as a breeding species to the Breckland district in the UK, which is also the main centre of distribution of Flixweed, the larval foodplant. The foodplant and consequently the moth depend on frequent soil disturbance.

The project was able to demonstrate a range of bare ground techniques, compare costs and benefits of each treatment at 15 different sites. Over 60 plots were established, mostly in late winter/spring 2009, but some were established in the autumn of 2009. Most late winter/early autumn bare ground plots were colonised by abundant nectar



Bare ground created at Cranwich with a bulldozer in March 2009 (above) and 16 months later (below).



plants over the spring and summer. Flixweed was confirmed on 12 plots and Grey Carpet adults were seen on four of those plots in 2009. By 2010 the Flixweed had developed on four rotovated plots and there were records of Grey Carpet larvae on four of these plots at King's Forest and Cranwich.

The bare ground plots created along forest rides in the Brecks have been alive with butterflies and moths this year due to the abundance of flowers and nectar attracting key breckland species including Marbled Clover, Forester and Dingy Skipper. The Forester, a UK BAP priority species already extinct in other counties in the East of England, was confirmed on seven bare ground plots on forest rides.

One 150 metre long plot along the forest ride in Cranwich (Grade A priority site in the FC/BC Lepidoptera Conservation Strategy) was covered in Viper's Bugloss, a typical wildflower in the Breck, but usually restricted to small areas of disturbance created by rabbits or moles. Underneath the canopy of Viper's Bugloss other plants included Common Bird's-foot trefoil, food-plant for Dingy Skipper, and Basil Thyme, foodplant for Basil Thyme Case-bearer moth (also a UK BAP priority species).



Above: Dingy Skipper

Monitoring work and habitat creation will continue through a new three year project *Norfolk Brecks Heathland Restoration for Threatened Butterflies and Moths* funded by Wren Biodiversity Action Fund which started in January 2010.



Above: Grey Carpet..



Above: Forester

Barberry planting programme reaps rewards for threatened moth

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Butterfly Conservation has been working with Forestry Commission England and other partners to secure the future of the UK BAP priority species the Barberry Carpet moth. The moth is now only known from a handful of sites in Wiltshire, Gloucestershire, Oxfordshire and Dorset, following widespread grubbing out of its food plant, Barberry, from hedgerows in the 19th century. FCE manages two of the remaining sites whilst the majority of the others are on privately owned farmland.

Appropriate hedgerow management is an important element of maintaining the remaining populations but in order to encourage the moth to increase in numbers, and to become re-established over a wider area, Barberry needs to be put back into hedgerows and woodland edges within the species' range. Native Barberry is rarely available from commercial growers making it rather difficult to encourage landowners to plant it out on their sites. Luckily Westonbirt Arboretum have been able to step in to support the project. Penny Jones, Westonbirt's propagator, has been growing on Barberry plants from seeds collected by volunteers. The latest batch of around 70 bushes should be ready to go out for planting in winter 2011 and Penny will be starting another batch this year. As well as growing



Mark Parsons/Butterfly Conservation

plants to support work on other sites, the Arboretum is one of the two FCE sites supporting the species and has its own colony living within the grounds, in a Barberry rich 'thicket'.

The other FCE site for Barberry Carpet is the only known site for the moth in Dorset. The Beat Wildlife Ranger, Mark Warn, has already undertaken two rounds of Barberry planting, in 2003 and 2006, to add to the existing Barberry resource at the site: and this year for the first time the Barberry Carpet moth has been found to be using the most recently planted bushes. The moth was also recorded in better numbers and from a wider area of the site than in 2009, when larvae of the moth were found only on one individual bush. That result followed two years with no records for the moth despite monitoring in both years. The moth can be illusive if occurring at low levels and this year's results indicate that numbers have begun to build at the site.

The planted bushes have been slow to grow and have needed a degree of care whilst getting established but in the long term should require no more than standard hedgerow management. The results from France Firs and a second private site, where recently planted bushes have also been occupied by larvae of the moth, provide positive feedback that the project will be able to deliver an increased habitat resource for the moth over a relatively short timescale.



Newly planted Barberry at France Firs in 2006

Thanks are due especially to Penny Jones and Mark Warn for their efforts in supporting the Barberry Carpet project and to the volunteer Wood Wardens who have been critical in assisting with the planting and aftercare of the Barberry at France Firs (Wareham Forest). Westonbirt Arboretum and France Firs are identified as priority sites in the *Lepidoptera on Forestry Commission Land in England; Conservation Strategy, 2007-2017*. The Barberry Carpet moth is fully protected by the Wildlife & Countryside Act (1981) and survey should be carried out under licence.

Forest District Visits

District review meetings will be held in each Forest District at least once throughout the duration of the 10-year Strategy. If you would like to discuss holding a meeting in your district please contact Bernadette Noake or Rebecca Wilson (contact details on page 4).

Encouraging volunteers to survey and monitor priority sites

Volunteers play a key role in surveying and monitoring Lepidoptera on Forestry Commission England sites. The data this provides is vital to enable understanding of the changes in Lepidoptera populations and provides a basis for management advice. To encourage further survey work at Forestry Commission England sites, get in touch with the local Butterfly Conservation branch (www.butterfly-conservation.org/bcbranches) and other local volunteers. If Forestry Commission staff request survey work, there may be Forestry Commission England funds available to fund volunteer expenses. Members of Butterfly Conservation are covered by Butterfly Conservation's insurance policy to carry out butterfly and moth surveys (in a voluntary role), including light trapping for moths. If you need further help to set up monitoring, help may also be available from Butterfly Conservation staff, so please get in touch with Bernadette Noake (contact details on page 4).

Training Days

Details of training events can be found on Butterfly Conservation's website www.butterfly-conservation.org/events. Please contact us if you are interested in arranging specific events.

Butterfly Conservation Factsheets

Butterfly Conservation has factsheets detailing the ecology of more than 50 different butterflies and moths (the majority of which are UK BAP priority species). Habitat management recommendations are also included. There are also three factsheets detailing the importance of Aspen, Goldenrod and Sweet Chestnut as foodplants for a wide range of moths and other insects. They also cover habitat management for moths on these plants. If you would like copies of any of the factsheets please contact Butterfly Conservation, or download them from www.butterfly-conservation.org/priorityspeciesfactsheets and www.butterfly-conservation.org/habitatadvice.



Next Issue

If you have any news about butterflies and moths from your district, (new projects, information or management advice) that you would like to appear in this newsletter then please write an article of no more than 400 words and send it and any accompanying photos to Bernadette Noake (бноake@butterfly-conservation.org) by 1st February 2011 so it can be included in the next newsletter.

Key Contacts

For further information please contact Bernadette Noake at Butterfly Conservation (бноake@butterfly-conservation.org, 01929 406004) or Rebecca Wilson at Forestry Commission England (rebecca.wilson@forestry.gsi.gov.uk, 01594 838634).