
Speckled Wood Newsletter Issue 13, Autumn 2013

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

Foreword

Welcome to the thirteenth 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. Thank you for all the positive feedback we have received for the last three issues and the articles sent for inclusion. This issue contains articles that focus on projects and management in the North and Yorkshire Forest Districts. Articles cover the following species: Large Heath, Small Pearl-bordered Fritillary, Duke of Burgundy and a tour of the butterflies and moths in North Yorkshire as well as the promotion of a new publications and Butterfly Conservation's 7th International Symposium. Details of threatened butterflies and moths factsheets and Butterfly Conservation events can be found on page 6.

Butterflies Bounce Back

Butterfly Conservation Press Office
Email: news@butterfly-conservation.org

The results of the world’s largest butterfly count has revealed that the warm sunny weather during the three week period of this year’s Big Butterfly Count has provided a bumper boost for our UK butterflies to bounce back following a string of poor years.

Of the nineteen butterfly and two moth ‘widespread’ species targeted for the Big Butterfly Count, four times as many were recorded during this year’s count than in 2012. A record-breaking 46,000 people took part counting more than 830,000 butterflies and day-flying moths across the UK and butterfly spotters counted almost twice as many individuals (on average) compared with 2012.

Small White topped the Big Butterfly Count 2013 chart with the Large White in second place. The numbers of these two species were up by more than 300%! The pretty Peacock came in at a surprise position of third and the garden favourite the Small Tortoiseshell recorded its best Big Butterfly Count result yet, coming sixth. Although the whites were very abundant it was the huge increase in Small Tortoiseshell and Peacock numbers that delighted the butterfly watching public. Both species have declined worryingly in recent years, but the Big Butterfly Count results are very promising, with Small Tortoiseshell numbers up by 388% compared to 2012 and Peacock numbers up by more than 3,500%. Results can be found at www.bigbutterflycount.org

Butterfly Conservation Surveys Manager Richard Fox said:

“It has been a truly memorable summer for butterflies, a wonderful spectacle for the many thousands of people who’ve helped with the Big Butterfly Count and a lifeline to the UK’s hard pressed butterfly populations. It reminds us that butterflies are resilient and will thrive given good weather and suitable habitats. The problem facing UK butterflies is not the notoriously variable weather but the way that humans manage the landscape. The record-breaking support for this year’s Big Butterfly Count shows the public is concerned about wildlife and willing to do something to help stem their long-term declines.”

For the fourth year running, the Big Butterfly Count took place in partnership with Marks & Spencer as part of its Plan A commitment to be the world’s most sustainable major retailer by 2015. For information on the Big Butterfly Count www.bigbutterflycount.org/about
A Butterfly and Moth tour of North Yorkshire’s Forests
Brian Hicks  Yorkshire District Ecologist, Forestry Commission
Dave Wainwright, Senior Regional Officer, Butterfly Conservation
Email: Brian.Hicks@forestry.gsi.gov.uk, dwainwright@butterfly-conservation.org

North Yorkshire’s forests may not support the huge diversity of moths and butterflies of some other forest districts but they are home to some important species nonetheless.

Where would be better to start a tour of the district’s forests than with a recent discovery of the Forester moth at Coatham Plantation. For those not familiar with this species, this green, iridescent day-flying moth is one of the most stunning that can be seen in these isles. Normally, a colony comprises perhaps a score or so of individuals, therefore it was something of a surprise to learn that over 1000 had been recorded at Coatham, making the colony the country’s most prolific by some considerable distance.

Furthermore, the species-rich wildflower meadow habitat in which it was found has only existed for about a decade, having been established by FC in the early 2000’s. Butterfly Conservation volunteers now monitor the site annually to ensure that the ongoing annual management of an early-autumn cut is benefitting the species. More intriguingly, the fact that this meadow creation has been such an obvious, if unexpected, success in improving the prospects of this UK BAP-listed species, might it not be possible to create similar habitat elsewhere?

Another recent discovery, again of a UK BAP-listed species, is that of the Argent and Sable moth in Boltby Forest, owned and managed by FC. This species is extremely rare in Yorkshire; the only other site from which it has been recorded in recent years is at the FC Strategy site Bishop’s Wood near York. Larvae of this species feed on young birch and bog myrtle. Butterfly Conservation staff and volunteers are currently searching the site for the leaf parcels, bound together with silk exuded by the caterpillar, to ascertain the extent of the colony area. This knowledge will be used to inform future management.

Moving onto butterflies, one of the district’s most prestigious woodland species is the Small Pearl-bordered Fritillary. Scattered populations of this species exist in many of the district’s FC Strategy forests, including Dalby, Cropton, Langdale and Harwood Dale as well as Wheeldale and Sneaton Moor plantations. Work undertaken by FC, targeted mainly on improving water vole habitat by clear-felling trees from stream sides, has had the secondary benefit of increasing the number of small pearls at a variety of sites. Dark Green Fritillaries share some sites with small pearls although tend to breed along wide rides rather than in riparian locations. The third fritillary that may be encountered during an exploration of the district’s forests is the Silver-washed Fritillary. This species disappeared from Yorkshire during the first half of the twentieth century, only to reappear at the start of the twenty-first. By no means common, the species has been recorded for the last five years, mainly from locations in Dalby Forest. Two other UK BAP-listed species, the Dingy Skipper and White-letter Hairstreak maintain a scattered presence in our woodlands. The former favours ride margins where its larval foodplant, common bird’s-foot trefoil grows abundantly; the latter is almost invariably seen flitting around the tops of elm trees.

Lastly, the forest district also supports several colonies of Large Heath. This peat bog-dwelling species is found in a few scattered locations around the margins of Sneaton Moor Plantation, owned by FC but never planted, but one of Yorkshire’s largest colonies is situated at May Moss where considerable habitat improvement works have been undertaken partly funded by the SITA trust. Most of this work has involved felling 70 hectares of conifers from the mire’s periphery and extensive drain blocking which, in time, increase both the area of the mire and also, presumably, the number of large heaths it supports. BC staff and volunteers are planning intensive moth surveys for 2014 in order to determine which moths the site supports. No doubt there will be the usual Emperor, Northern Eggar, Fox Moth etc that are normally associated with such sites but it is also possible that other, much rarer moths such as Manchester Treble-bar will also feature.
The Duke of Burgundy is one of the rarest breeding butterflies in Yorkshire. It is only found on ten sites which is 16% of the nation’s entire complement. North Yorkshire’s colonies are split between two landscape networks: Helmsley which contains the majority of sites, and Pickering with only one remaining extant colony.

Not only is it perilously rare, it is also disappearing from an increasing number of the rough, scrubby limestone grasslands and woodland rides where it is found. Inappropriate habitat management and agricultural “improvement” can be factors contributing to the 62% of extinctions in the county.

However, not all colony losses can be attributed to negligent land-owners; conservationists have also played a role as they have sought to remove scrub and initiate restorative grazing on long-neglected grasslands – management ideal for wildflowers and some other invertebrates but not, alas, for the Duke of Burgundy which finds rank, scrubby grasslands much more to its liking. Only in habitats such as these are its caterpillar food plants, cowslips and primroses, sufficiently large enough to encourage egg-laying by females.

Management of the Helmsley colonies is ongoing and most appear to be responding. However, in the Pickering area, where the butterfly is occurring on only one site, the aim is to manage areas of potential habitat with a view to encouraging its spread, either through natural colonisation by the species or through planned and regulated releases.

With this aim in mind, Forestry Commission and Butterfly Conservation are working in partnership to improve habitat condition at Pexton Bank in the FC Strategy site Dalby Forest by widening a ride over one kilometre long, creating new glades as well as extending existing ones and by removing shade-casting trees, thus exposing the site’s abundant stock of primroses to direct sunlight and in the process rendering them usable to the Duke of Burgundy. The work is being funded by the landfill tax redistribution organisation WREN and by FC.

Volunteers have also made a substantial contribution, both by clearing scrub and small trees and by planting primulas to augment existing stocks. In due course, the whole site will be fenced and a regime of late summer to autumn cattle grazing initiated. This programme of grazing will inhibit regeneration of scrub and trampling will help to control encroaching bracken and create conditions ideal for the establishment here, as have Marbled White and Dingy Skipper. Commoner species, such as Ringlet and Meadow Brown abound while thinning has improved the chances of seeing Purple and White-letter Hairstreak flitting around the tops of oaks and elms respectively.

The nearest-known Duke of Burgundy colony lies roughly 2.5km to the west of Pexton Bank, so natural colonisation remains a possibility. Should this not occur (and assuming that habitat restoration at Pexton succeeds) then captive breeding followed by release of stock may be attempted. Watch this space!
Gems of the North, Kielder Forest, Grizedale Forest and Whitbarrow
Priority Sites Grade A
Tom Dearnley, North Forest District, Forestry Commission
Email: Tom.Dearnley@forestry.gsi.gov.uk

In the North District some of the forests we manage contain vast areas of peat bogs, the
greatest collection being the Border Mires in the FC Strategy site Kielder Forest. These
wetland jewels, which were often purchased as part of a large parcel of land, contain a
limited but important range of plants which thrive in peaty, cool and moist conditions.
Similarly the butterflies which are associated with mires are limited in terms of species,
but not necessarily in numbers.

For a few weeks around July, peat bogs and wet heath can play host to small clouds of
Large Heath butterflies. This northern specialist lays single eggs on the base of
Hare’s-tail cotton grass *Eriophorum vaginatum*, the only cottongrass with a single
erect head. Large Heath butterflies live in colonies which, on the right day, can pro-
vide a spectacular sight, worth the trip to some of the more remote public forests.

Over the past 30 years, mires which had been partially planted in the past have been
cleared of trees (sometimes through spectacular means) and had their water tables
raised through blocking former drainage ditches, helping to ensure the survival of this
great northern butterfly.

Small Pearl-bordered Fritillaries are another popular resident of FC forests in the north. The
advantages of harvesting across a landscape scale means that the right kind of habitat for Small
Pearl-bordered Fritillary (damp grassland with common dog or marsh violet) is constantly being
created. Butterfly Conservation’s Dave Wainwright completed a Small Pearl-bordered Fritillary
survey in 2002/3 which determined it’s status in Northumberland. Ten years later Dave and
other naturalists continue to record good numbers of the butterfly, particularly in the southern
part of Kielder known as Wark Forest.

A gem in the North, Morecambe Bay is bordered by a crescent of woodlands established on
limestone pavement which support a superb flora and are a hotspot for butterflies. The FC Strat-
egy site Whitbarrow, a National Nature Reserve and several smaller woodlands are similarly
diverse. This is an important site for High Brown Fritillary and Duke of Burgundy butterflies.
The Pearl-bordered Fritillary, Small Pearl-bordered Fritillary and Dark Green Fritillary also
inhabit this wood. Beat Forester, Martin Colledge has been working with Butterfly Conservation
to establish improved habitat in many of these forests, often through better connectivity and PAWS restoration.

The limestone woodlands around Morecambe Bay and nearby FC Strategy site Grizedale Forest are also a little bit special.
This year’s record of High Brown Fritillary in Grizedale is confirmation that Britain’s rarest butterfly is still present in the most
northerly site in the UK. Forestry Commission volunteers and Butterfly Conservation’s Martin Wain are currently mapping it’s
distribution in Grizedale, an exercise which we hope will be conducted in the surrounding FC woodlands next year.

In time and with some help from the Butterfly Conservation led,
Conserving the High Brown Fritillary on the Morecambe Bay
Limestones project this stunning collection of forests will con-
tinue to provide a habitat stronghold for many threatened butter-
fly species.
New Publications

**Patrick Barkham’s Guide to British Butterflies**
Order from: [www.greattakestv.com](http://www.greattakestv.com)
Cost: £27.95 plus £1.50 p&p

*Patrick Barkham’s Guide to British Butterflies* is a comprehensive account of the UK’s species. Viewers are treated to stunning butterfly and landscape images, key ID tips to separate tricky species, distribution maps, caterpillar shots and information on food-plants, flight periods and what to plant to attract specific species. There is enough in this DVD to keep both amateur and expert happy and if his performance is anything to go by this won’t be the last time Barkham appears on our screens.

Liam Creedon

**Britain’s Day-Flying Moths : A field guide to the day-flying moths of Britain and Ireland**
David Newland, Robert Still & Andy Swash
WILDGuides. £17.95
Order from:
Most naturalists are not aware that there are more day-flying moth species than butterflies in the British Isles and some of the colourful ‘butterflies’ they spot are in fact moths. This informative field guide describes them all plus a lot more besides such as species morphology, biology, identification keys, handy where to look for day-flying moths and gardening tips; the list goes on. Butterfly transect recorders, general naturalists and seasoned moth recorders will want a copy of this concise guide - a ‘must have’ for the field naturalist!” Les Hill

**Woodland Trust -Wood Wise**
This issue focuses on woodland management for sun-loving butterflies. The case studies look at a number of butterflies of conservation concern, such as the Pearl-bordered Fritillary and Duke of Burgundy, and a range of management techniques, including coppicing and landscape scale conservation. Contributions come from organization’s such as Butterfly Conservation and the Woodland Trust.


**Butterfly Conservation’s 7th International Symposium**

The ecology and conservation of butterflies and moths

The Symposium will include the latest science on how to reverse the decline of butterflies & moths, and conserve their habitats.

To be held on 4th to 6th April 2014 at Southampton University. Book now for an early bird discount of 15%.

For the first time registration and abstract submission is available on-line, at [www.butterfly-conservation.org/symposium](http://www.butterfly-conservation.org/symposium).
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 (http://butterfly-conservation.org/49/in-your-area.html) and other local volunteers. If Forestry Commission staff request survey work, there may be Forestry Commission England funds available to fund volunteer expenses. If you require assistance to set up monitoring please get in touch with Butterfly Conservation Regional Branches (http://butterfly-conservation.org/49/in-your-area.html) or Caroline Kelly (contact details below).

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 seven new factsheets being produced on Brown Hairstreak, Grayling, Forester, Goat Moth, Grey Carpet, Sloe Carpet and Dyers Green weed species that are available for download only. The three below are currently on the website and the others will be available by the end of April 2013. If you would like copies of any other factsheets please contact Butterfly Conservation, or download them from www.butterfly-conservation.org/Butterfly-Factsheets, www.butterfly-conservation.org/Moth-Factsheets, www.butterfly-conservation.org/Habitat-AdviceFactsheets

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 Caroline Kelly (ckelly@butterfly-conservation.org) by 1st February 2014 so it can be included in the next newsletter.

Key Contacts

For further information please contact Caroline Kelly at Butterfly Conservation (ckelly@butterfly-conservation.org, 01929 406029) or Jay Doyle at Forestry Commission England (jay.doyle@forestry.gsi.gov.uk, 01420 23666).