

Wider Countryside Butterfly Survey Annual Newsletter 2014 Season

Compiled by the WCBS team – Zoë Randle, Tom Brereton (BC), Sarah Harris, David Noble (BTO) and David Roy (CEH).

Peacock



About the WCBS

The Wider Countryside Butterfly Survey (WCBS) forms part of an integrated approach to monitoring butterflies through the UK Butterfly Monitoring Scheme (UKBMS). The WCBS was developed with a stratified random sample of 1km square survey locations across the UK and launched in 2009. It aims to generate unbiased data on the population status of common and widespread butterfly species and to provide a dataset for research into the effects of environmental change and strategic conservation measures to inform policy. The survey complements conventional transect recording, which has been running since 1976 and is very effective at monitoring habitat specialist butterflies and lowland semi-natural habitats.

The WCBS runs as a partnership between Butterfly Conservation (BC), the British Trust for Ornithology (BTO), the Centre for Ecology and Hydrology (CEH) the Joint Nature Conservation Committee (JNCC), and is supported and steered by Forestry Commission, Natural England, Natural Resources Wales, Northern Ireland Environment Agency, and Scottish Natural Heritage. Participants include recorders from the BTO/JNCC/RSPB Breeding Bird Survey (BBS) and BC's volunteer network.

Changes to WCBS reporting and the newsletter format

From 2009-2013 we reported on provisional trends in wider countryside species using WCBS data. In 2014, an important development was that WCBS data were used alongside transect data to compile Official Statistics on population trends in wider countryside species at UK and country levels. The individual

species trends were published on the [UKBMS Website](#) and summarised in the UKBMS [2013 Annual Report](#) to recorders, this will continue to be the main mechanism for disseminating annual results from the UKBMS.

The 2014 UKBMS Annual Report to recorders will show a further enhancement with trend plots for wider countryside species showing separate lines for WCBS and conventional transect data.

In view of these changes, the need for reporting on WCBS results via this newsletter is reduced and our emphasis will change, with a broader remit, but focussing on development work required in order to continue to improve the scheme. We hope you like the new format, but please do let us know if you have any suggestions for future content.

Coverage in 2014

In total, over 3,000km of survey line was walked by over 700 recorders who made 1,738 visits to 831 squares (464 BC, 367 BTO BBS). There is considerable turnover in WCBS sample squares. Approximately 2,000 recorders have participated in the scheme over the years, sampling 1,716 squares.

In 2014, although 113 new squares were established (58 by BC and 55 by BTO BBS recorders), 208 squares recorded in 2013 were stopped (126 BC and 82 BTO BBS), with a net loss of 44 squares (5%). A combination of factors were likely involved including a lack of resources to run training workshops, less favourable summer weather and the loss of some key WCBS Champions (see situations vacant). We are really keen to redress this downturn and describe priority coverage gaps later in the newsletter.



2014 SURVEY

Results Round-up

In 2014, 43 butterfly species were recorded on WCBS surveys, with 25 species (one more than 2013) being recorded in 30 or more squares and 18 of these (one fewer than 2013) recorded in 100 or more squares.

Meadow Brown, Gatekeeper, Ringlet and Small White accounted for over half of butterflies counted. During the core July to August survey period, 1,467 visits were completed with 634 squares (78%) receiving the required two visits. Of the 24 wider countryside species detected during repeat summer visits (i.e. Orange-tip which was not seen over this period), almost two-thirds (15 of 24 species) were less widespread than in 2013, with nine species more widespread.

The biggest losers were Large White, which was seen in 14% fewer squares compared to 2013 and Small Copper, which was seen in 10% fewer squares. Comma, Ringlet, Small White and Small Heath were also noticeably thinner on the ground.

Of the species which were more widespread in 2014, Common Blue, Gatekeeper, Speckled Wood and Small Skipper fared best, with the latter up by the greatest number of percentage points (+7%). Small Tortoiseshell climbed one place to become the third most widespread butterfly in WCBS squares in 2014, although it was seen in proportionately slightly fewer squares than in 2013. This represents a remarkable turnaround in the fortunes of this garden favourite since the start of the scheme, when it was ranked a lowly ninth and was down 17 percentage points in



Small Copper was seen in 10% fewer WCBS squares in 2014 than in 2013

terms of numbers of occupied squares.

The most intriguing Small Tortoiseshell records in 2014 undoubtedly came from what on the surface would appear to be bleak butterfly habitat - Cambridgeshire fenland near Newborough, north east of Peterborough. On 8th July David Withrington recorded Small Tortoiseshells on every single WCBS section, with the final total counted reaching an astonishing 278. This is the second highest visit count for this butterfly in the series, beaten only by 302 counted by David Sutcliffe in moorland fringe habitat near Halifax, West Yorkshire on 7th August 2013. This demonstrates that interesting discoveries may await us in unsuspected corners of the countryside.

There was a welcome modest increase in Wall Brown, which was more frequently seen than both Painted Lady and Holly Blue, with records from 59 squares. The regular migrants had mixed fortunes, with Clouded Yellow and Painted Lady being seen in proportionately fewer squares than the previous year, though Red Admiral was far more widespread with occupancy up by a whopping 27

percentage points.

Of the habitat specialist species, Dark Green Fritillary, Grayling and Silver-washed Fritillary were recorded in a good scatter of squares, with the latter species being more frequently encountered than Holly Blue. Respective numbers of squares recorded in for these three species were 19, 19 and 44.

Of the rarer specialist species, a presumed migrant Swallowtail was recorded near Ramsbury, Wiltshire on 27th July. There has only been one previous sighting of this butterfly on WCBS surveys; along the River Bure in the Norfolk Broads in July 2011.

Lulworth Skipper was again recorded at a known colony along the Dorset coast near Swanage. This square has been regularly walked in each year of the WCBS, and the time series of counts indicate 2014 was by far and away the best year for this butterfly at this site in the six-year series (e.g. 103 on 3rd August 2014 versus one on 6th August 2009). We await results from the full UKBMS to be released in March 2015, to confirm



Newborough, Peterborough - this seemingly bleak arable landscape recorded more Small Tortoiseshells than any other WCBS square in 2014

Table 1: How widespread were butterflies on WCBS squares in 2014 and comparisons with 2013

Species	% squares recorded in	Change in % points from 2013	2014 rank	2013 rank
Meadow Brown	90.0	-0.1	1	1
Small White	83.9	-4.6	2	2
Small Tortoiseshell	77.0	-3.4	3	4
Gatekeeper	74.0	+4.4	4	6
Large White	71.5	-13.7	5	3
Green-veined White	68.6	-2.8	6	5
Speckled Wood	68.6	+6.4	6	9
Peacock	67.0	-1.6	8	8
Ringlet	64.4	-5.1	9	7
Red Admiral	62.1	+26.7	10	11
Comma	39.6	-5.6	11	10
Common Blue	36.9	+4.2	11	12
Small Skipper	34.1	+6.6	13	14
Large Skipper	29.8	+1.5	14	13
Small/Essex Skipper	19.9	+2.5	15	18
Brimstone	16.6	-1.1	16	17
Marbled White	16.2	-0.5	17	19
Small Copper	15.8	-10.0	18	15
Small Heath	14.8	-4.1	19	16
Essex Skipper	11.5	+2.9	20	23
Wall Brown	9.3	+1.4	21	24
Holly Blue	9.1	-3.2	22	21
Painted Lady	8.4	-5.7	23	20
Clouded Yellow	7.6	-2.6	24	22
Silver-washed Fritillary	6.9	+0.1	25	25
Brown Argus	6.5	+1.4	26	26
Dark Green Fritillary	3.0	-0.5	27	27
Grayling	3.0	+0.8	27	29
Purple Hairstreak	2.7	-0.5	29	28
White Admiral	1.4	-0.3	30	30
Orange-tip	0.9	-0.1	31	33
Scotch Argus	0.9	-0.2	31	32
Small Pearl-bordered Fritillary	0.9	-0.5	31	31
White-letter Hairstreak	0.9	+0.5	31	36
Chalk Hill Blue	0.6	-0.2	35	34
Silver-studded Blue	0.6	+0.2	35	36
Adonis Blue	0.3	-0.1	37	36
Brown Hairstreak	0.3	-0.1	37	36
Lulworth Skipper	0.3	0	37	42
Northern Brown Argus	0.3	0	37	42
Small Blue	0.3	-0.1	37	36
Large Heath	0.2	-0.5	42	35
Purple Emperor	0.2	+0.2	42	-
Swallowtail	0.2	+0.2	42	-

whether it has been a good year for this butterfly across the whole of the UK.

During the core period of July and August there were 21 WCBS squares (23 visits) where no butterflies were seen. Butterflies were not seen on either of the two visits at squares near Whittonditch, Wiltshire and near Kensington, London.

Moths were counted in 25% of WCBS squares, which is 10 percentage points fewer than in 2013. BC recorders counted moths in 118 squares (58% of the total) and BBS recorders 84 squares (42%). In total 821 individuals of 43 species were counted, four more than last year. For the sixth year in a row Silver Y was the most widespread moth occupying 23% of squares followed by Six-spot Burnet (20%) and Cinnabar (20%).

Dragonflies were counted in 330 squares (40%), seven more than in 2013. BBS recorders counted dragonflies in 188 squares (57%) and BC recorders in 142 squares (43%). In total 4,348 individuals of 29 species were seen. For the sixth consecutive year, Common Darter was the most widespread species, being counted in 32% of squares; Common Blue Damselfly was seen in 25% of squares as was Brown Hawker. For the third consecutive year Common Blue Damselfly was the most abundant species.



Red Admiral – recorded in almost two-thirds of squares, compared with just over a third of squares in 2013

NEWS

Latest from the WCBS

Kate moves on, welcome Sarah Harris

We would like to welcome Sarah Harris to the WCBS team. Sarah runs the Breeding Bird Survey having taken over the role from Kate Risely who has moved within the BTO to run the Garden Bird Watch scheme. Sarah is a keen naturalist, with a particular interest in moths and birds, having formerly worked as the White-tailed Eagle Officer on the Isle of Skye. Thanks go to Kate for doing a fantastic job overseeing the BTO's input to undertaking survey work for the WCBS from 2009 to 2013.



*Sarah Harris – Breeding Bird Survey
Organiser*

WCBS on Twitter



To enable within season interactive reporting of butterfly sightings and WCBS News, a Twitter account for the survey was set up in 2013. To read all the Twitter feeds covering butterfly emergences through the season, noteworthy counts, migration events, news of recent research publications, conservation stories and many other snippets follow [@wcbslive](https://twitter.com/wcbslive).

National Butterfly Recorders' Meeting

The full results from the WCBS will be premiered at Butterfly Conservation's National Recorders' Meeting to be held at the Birmingham and Midland Institute in Central Birmingham on Saturday 28th March 2015. All recorders are welcome to attend this annual event, which comprises a full day of talks on the results of butterfly survey and monitoring through the BNM and UKBMS projects. The website for the venue is www.bmi.org.uk, including the location www.bmi.org.uk/location.html. It is an easy walk from New Street station and there are several public car parks close to the venue. To book a place for this exciting and popular event contact [lan Middlebrook](mailto:lan.middlebrook@bmi.org.uk).

Research news

Comparing butterfly trends between WCBS and UKBMS conventional transects

David Roy from CEH has recently completed a comparative analysis of population trends in wider countryside species from WCBS squares against those measured from conventional UKBMS transects. Across the 26 species analysed, there was a significant positive relationship between trends measured from the two schemes between 2009 and 2013, the period when both schemes were operating fully. There was a tendency (17 out of 26 species analysed) for these changes to be greater within WCBS compared to conventional UKBMS transects, although this effect was not consistent across comparisons between pairs of consecutive years. When assessing these individual year-to-year changes, there was however a significant correlation between the two schemes in all cases. The results highlight that over relatively short time periods, weather patterns are likely to dominate butterfly population fluctuations and lead to comparable trends across monitoring schemes. Over longer time periods, differences in land management may affect habitat condition differently for protected areas versus the wider countryside and it is therefore important to maintain comprehensive butterfly monitoring programmes to detect and interpret such effects.

WCBS at BC's 7th International Symposium

Uses of WCBS data featured heavily at Butterfly Conservation's International Symposium held in April 2014. Zoë Randle kicked off events describing the first five years of the Wider Countryside Butterfly Survey, followed by David Roy, who assessed whether trends in butterfly species were comparable between the WCBS and traditional transects. Kate Risely presented the results from a BTO study that used WCBS data to investigate patterns and causes of corresponding variation in butterfly and bird communities. The research demonstrated that in general terms, areas supporting a relatively high variety of widespread birds were also rich in common butterflies. However, the more specialised and rarer bird species were distributed differently in the landscape to rare and specialised butterflies indicating that these groups have different needs at a local level and therefore require bespoke targeted conservation effort.

Making WCBS data available on the NBN Gateway

The National Biodiversity Network (NBN) Gateway is the UK's main website providing access to biodiversity data to support conservation, research and environmental decision making. The NBN Gateway currently holds more than 100 million biological records supplied by over 160 data providers and is one of the largest wildlife databases in the world. The WCBS is part-funded by Government Agencies which requires us to make the data publicly available, this means it will be easier for biodiversity to be taken into account in decision making.

We intend to make WCBS data available annually each June at hectad (1km²) resolution. We will be revising the letter to landowners informing them of this requirement; whilst in the online data entry system there will be the option to opt out of making data publicly available for sensitive locations. Please contact Zoë Randle or Sarah Harris if you have any questions on this matter.

WCBS recorders have contributed more than 200,000 butterfly records to the BNM database, with summary data to be made available on the NBN Gateway.

NEWS

Regional training and feedback events

In Suffolk the WCBS will be covered at two upcoming events; Saturday 25th April New Members & Novice Day at Barnham Village Hall and Barnham Common, Saturday 2nd May Transect Training Session at Bury St Edmunds. For further details of both events please contact Rob Parker on 01284 705476.

In Yorkshire Rachel Pateman will be running a recording and monitoring butterflies workshop. Date and location to be confirmed but keep an eye on the [Yorkshire Branch Website](#) or contact Rachel for more information.

In Dorset there are two meetings planned so far; Butterfly Trends in South Dorset at 7:30pm on Thursday 12th March in Wareham. For further details contact Jon Bellamy via 01929 450182; North Dorset Walkers' and Regional Surveyors' Meeting at 7:30pm on Friday 20th March in East Stour. For further details contact Bill Shreeves on 01747 852587.

Northern Ireland Recorders' Day is on 11th April at Peatland's Park, Armagh. Contact [Catherine Bertrand](#) for more information. Two WCBS training days are planned in Northern Ireland but details are yet to be finalised, please contact Catherine for further information or to express an interest in attending.

Other future events will be posted on the [UKBMS website](#).

The value of the WCBS to our knowledge of insect distribution

Although the main purpose of the WCBS is to get good data on the abundance of common and widespread butterflies, the scheme generates a large volume of valuable data on the distribution of insects. Over the period of the scheme (including the pilot testing years), the WCBS has contributed 213,436 butterfly records of 54 species to the Butterflies for the New Millennium (BNM) database. The only regular UK butterflies not to have been recorded are Black Hairstreak, Duke of Burgundy, Glanville Fritillary, High Brown Fritillary, Large Blue, Mountain Ringlet and Chequered Skipper. The latter two species are relatively widespread, highlighting the need for more recording effort in montane upland areas of Scotland.



Learn about the WCBS at our training events

There have also been 7,840 records of 38 dragonfly species, which have been forwarded to the British Dragonfly Society and 3,940 of 77 moth species which, after verification by County Moth Recorders will enter the National Moth Recording Scheme database held by BC. There have been some interesting records generated by the WCBS. For example, in 2014 a record of Blood-vein in Gloucestershire was only the second for 10km square SP10 and the first since 1974.

For the 2015 field season, we plan to fully integrate WCBS data entry with UKBMS transect data entry, which will give recorders the opportunity to capture incidental sightings from a wider range of moths and other wildlife groups that may be recorded on their survey squares. Zoë and Sarah will be in touch as soon as the new online system goes live.



WCBS recorders have contributed more than 200,000 butterfly records to the BNM database



Blood-vein recorded in SP10 for the first time in 40 years

VIEWPOINT

Perspectives from a new Champion, Twm Wade, BC Suffolk

Here Twm Wade talks about his fresh approach to the challenging role of becoming a BC Branch Champion

I became a BC member in 2012 and took on the role of WCBS Branch Champion last year. I do not think what I did was very much but it now seems my response to the challenge is something to write about.

I was lucky to be in the right place at the right time. Suffolk is an expanding branch with a spread of membership across the county wanting to become more involved in BC activities. The WCBS had been established a few years with methodologies and systems in place. I needed to get organised as there was no national system to adopt. The key data

I needed was what squares I had in the scheme and who was surveying them. I devised an Excel workbook recording what was where and who the surveyor was. There was a problem with maps which I now keep separately.

Once I had verified everything, I needed to find surveyors for vacant squares. The key to everything is simple, effective communication. Vacant squares were advertised with place names and post codes; if interested, people could quickly locate them. While the website with the detail was made known, I provided a start-up summary that got them on site for a preview visit early on. I wanted to keep the momentum going and was there to help. So was this a fresh approach? It was to me, and my spreadsheet worked. Let me have your thoughts.



Taking part in the WCBS by Aaron Davies, BBS recorder

I participate in projects such as the Wider Countryside Butterfly Survey for purely selfish reasons. Firstly, as an ecologist undertaking surveys such as this allows me to practise survey techniques and identification skills. It also looks great to potential employers.

However, there is another purely selfish reason that I like undertaking these surveys; I enjoy watching butterflies! It also gets me out and about in some lovely areas and helps me understand the wildlife in my local patch in so much more detail.

Taking part in a nationwide research project that utilises citizen science in such a way is also incredibly satisfying, and incredibly important. Three-quarters of UK butterflies have shown a 10-year decrease in distribution or population levels. The only way we can measure this, and subsequently understand the full depth of the issues facing butterflies is through surveying as much of the UK as possible. This is something that would be impossible for conservation organisations to manage on their own and one, therefore, that is important for as many people to take part in. And again, selfishly it is incredibly rewarding!



VIEWPOINT

Why Natural England values the WCBS

Natural England and its predecessor bodies has always been a strong supporter of the UKBMS, with many of the original transects on our NNRs undertaken by our staff and volunteers. Information from the scheme has been invaluable in showing us where management was successful and trends were better than the 'average' site.

Increasingly the Government agencies have to show that the investment of public money – your taxes – is worthwhile. The introduction of the Wider Countryside Butterfly Survey (WCBS) provides the perfect way to look at the status of butterflies on farmland in response to agri-environment schemes that the Government is paying for.

Currently, over £1million per day is paid to farmers across England to improve the way they provide environmental benefits – including creating and managing habitat for butterflies. The data from the WCBS helps us to assess whether these schemes are working and, if not, what needs to be done to make them work.

An additional valuable role that data from the WCBS plays is in helping Government report on changes and trends in the countryside. This is done through a set of

biodiversity indicators and the WCBS (and UKBMS) butterfly data contributes directly into several of these indicators.

Without the WCBS we would have only the UKBMS data from existing high quality sites and therefore would not be able to draw attention to the need for better land management outside these special sites. Butterflies, and other wildlife

need more than just the nature reserves and designated sites, hence it follows that knowing how they are faring in the wider countryside is an essential piece of information in the conservation armoury!

Keith Porter, Principal Adviser – Evidence Access & Mobilisation



Knowing how butterflies are faring in the wider countryside is an essential piece of information in the conservation armoury

GETTING INVOLVED

Help develop the scheme locally

The WCBS operates through the combined efforts of national co-ordinators and local co-ordinators.

National co-ordinator roles provide support to both recorders and local co-ordinators, generating sampling squares, providing recording forms and guidance notes, running training events, helping with local co-ordination when there are short falls and providing feedback in a variety of forms. Zoë Randle co-ordinates activity by BC recorders by liaising with BC Branch co-ordinators known as 'Champions', whilst Sarah Harris (BTO BBS National Organiser) is the first point of contact for BTO volunteers.

The role of BC Champions is crucial in finding volunteers to take part in the survey. Champions may be involved in a range of other activities that make the

difference in having a well-run scheme, including being on hand to offer advice, providing training if needed, giving gentle reminders of data deadlines and providing local feedback .

A full list of BC Champions is given at the end of the Newsletter

Resources to help run WCBS training workshops

To help WCBS Branch Champions run monitoring events a training package has been put together comprising PowerPoint presentations on butterfly identification, survey methods and location of squares, together with a full set of recording forms and guidance notes. If you are interested in running a workshop locally to encourage participation in the WCBS and would like a pack to help with this, please contact Zoë Randle at BC.

SITUATIONS VACANT

New WCBS Champion needed for BC Lincolnshire branch.

Contact: Zoë Randle for details



WCBS squares in Lincolnshire

Priorities for improving coverage 2015

We set ourselves an initial target of sampling 1,000 squares through the WCBS and we are currently about 80% there in terms of achieving this. With nearly 200 more squares to go to meet this target, we thought it would be useful to highlight some of the priorities and opportunities available to improve coverage.

BC Branch level priorities

Ensuring even coverage across the UK remains a high priority. Although squares sampled in 2014 spanned from the southern tip of the Lizard Peninsula in Cornwall to Castletown, near John O' Groats in Highland, coverage was uneven across the UK. BC Branches/BTO regions with the least coverage (at less than 10 squares) in 2014, where new squares are urgently required include Lincolnshire (5), Warwickshire (7) and Cornwall (9). Other regions where new squares are required are illustrated in Figure 1.

Specific coverage gaps

There are a number of other opportunities to fill specific coverage gaps including:

Re-surveying squares with long data runs

These squares are especially important for comparing trends from WCBS data with conventional transects and assessing the added value of the WCBS. In particular, there are 11 squares with relatively long data runs (six or more years) that were not walked in 2014, which it would be really good to get surveyed in 2015. These are located in the following areas: near Kylesku, NW Highland; SW of Inverness, Highland; Exmoor (two squares); NW of Petersfield, Hampshire; NE of Upton on Severn, Worcestershire; NE of Tewkesbury, Gloucestershire; N of Old Sodbury, Gloucestershire; W of Romsey, Hampshire; W of Dorking, Surrey; and W of Uckfield, East Sussex.

Remote upland squares

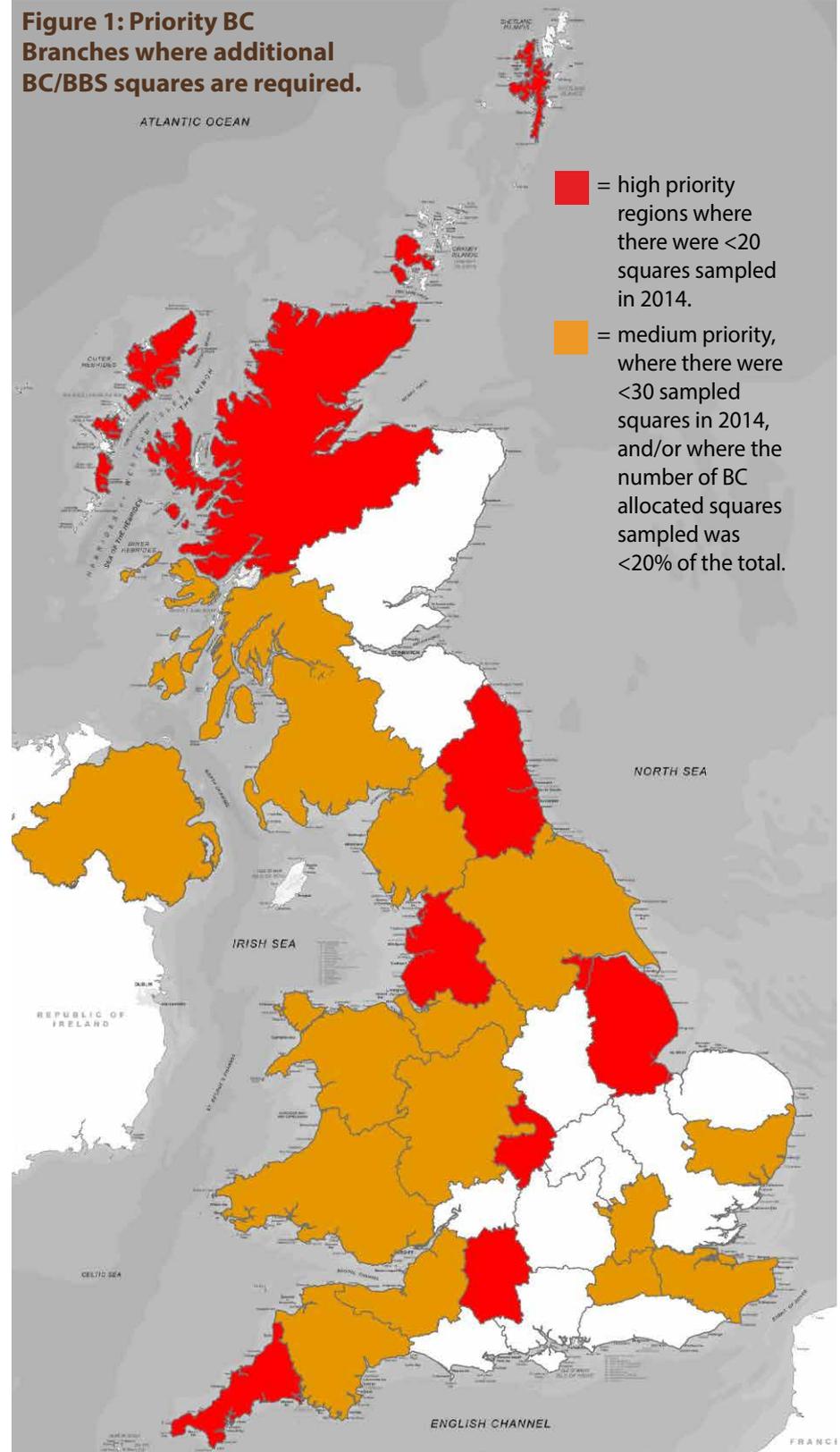
Getting samples in remote parts of the uplands is often a problem for survey and monitoring programmes, but it is important to ensure that upland areas are well covered in the scheme to ensure representativity. On the plus side, many of these squares offer exciting

opportunities for the more adventurous recorder to search for butterflies in stunning scenery, where few recorders have been before. If you feel you are up to this challenge please contact your BC Branch Champion or Zoë Randle at BC HQ for a list of square options and more information.

Squares that have never been surveyed before for butterflies

Although, the focus of the scheme is

to generate information on butterfly abundance rather than distribution, as we described earlier, the WCBS can make an important contribution to our knowledge of butterfly distribution. In this respect, there are 134 randomly selected WCBS squares yet to be surveyed for which we also have no historical butterfly records. For further details please contact your BC Branch Champion or Zoe Randle at BC HQ.



HURRY! SQUARES UP FOR GRABS

SQUARE VACANT

Werrington
Cambridgeshire



Never before surveyed
– no BNM records.
Easy access from Peterborough.

To survey contact: **Vince Lea**,
BC Cambs & Essex
e vincelea@btinternet.com
T 01223 263962



SQUARE VACANT

Coldbergh Edge
North Yorkshire



Beautiful moorland in a remote part
of the Yorkshire Dales.
Breathtaking views.

To survey contact: **Rachel Pateman**,
BC Yorkshire
e rachelpateman@gmail.com
T 01904 489787



SQUARE VACANT

Wishaw
Warwickshire



Easy access off the M42.
Footpaths across the square for
easy route planning.

To survey contact: **Keith Warmington**,
BC Warwickshire
e keith@warmies.co.uk
T 01827 715873



SQUARE VACANT

Billingshurst
West Sussex



Four previous years of data.
Route already established
via footpaths.

To survey contact: **Penny Green**,
BC Sussex
e penny@daveandpen.co.uk
T 07960 388096



SQUARE VACANT

Sandy
Bedfordshire



Never before surveyed
– no BNM records. Easy access
from Sandy, near RSPB HQ.

To survey contact: **Clare Topping**,
BC Beds & Northants
e ctopping@ratfox.net



SQUARE VACANT

Scotton Common
Lincolnshire



Nr. Scotton, woodland with rides.
Surveyed once before in WCBS.
Easy access from road.

To survey contact:
Zoë Randle, BC Head Office
e survey@butterfly-conservation.org
T 01929 406006



Tricky skippers

The 'golden' skippers represent a particular identification challenge to recorders, especially Small and Essex Skipper, which are small and rather similar in size, behaviour and habitat. An indication of their similarity is given by the fact that the Essex Skipper was not recognised as a separate species until 1889.

Why identify?

In the WCBS, only two-thirds of Small and Essex Skippers are identified to species level, with the remainder being lumped together as Small/Essex Skippers. In other European monitoring schemes, greater efforts are made to split the species, and they are considered relatively easy to identify, chiefly because there are so many more butterfly species and difficult identification challenges! There is certainly a case to carefully make greater efforts to identify Small and Essex Skipper to species level where possible to increase the representativity of abundance indices and trends.

Differences

The most obvious difference between the two is that the Essex Skipper has 'dipped in ink' black tips to its antenna (including underneath), while those of the Small Skipper are dark brown or orange. You need to closely observe the very end of the antennae from head and side on to confirm this feature.

For worn individuals, where the scales at the tip of the antennae have been abraded, the orange cuticle of Small Skipper is in contrast to the black cuticle found in the Essex Skipper.

Males of both species differ from females by the presence of a sex brand on the upper side forewings, which is a short black line of specialised scent scales. The Small Skipper sex brand curves slightly rearward, and does not run parallel to the leading edge of the forewing. The Essex Skipper has a shorter, narrower and straighter sex brand that runs parallel to the leading edge of the forewing, and central, slightly out of line part, that is little more than a short dash.

Survey tips

If large numbers are flying it may not be practical or necessary to identify every individual counted.

You can identify a sample of the individuals and the results can be used to determine the proportion of each species present. For example, if from 45 butterflies seen, 5 Essex and 8 Small Skippers were confirmed, the remaining 32 unconfirmed individuals can be divided up proportionately to give an estimated 12 Essex and 20 Small Skippers, thus giving totals of 17 Essex and 28 Small Skippers. Under UKBMS criteria you need to confirm the identity of at least 10% of the individuals seen in order for the estimated counts to be accepted. In situations where individuals are too numerous to achieve this, i.e. over 100, you should confirm the identity of at least 10 and preferably 20 individuals.

Small Skipper Sex brand long, at an angle to the forewing and wiggly towards the middle



Essex Skipper Sex brand short, parallel with forewing edge and tapered towards the middle



Further useful pictures highlighting differences can be found on the UK Butterflies website

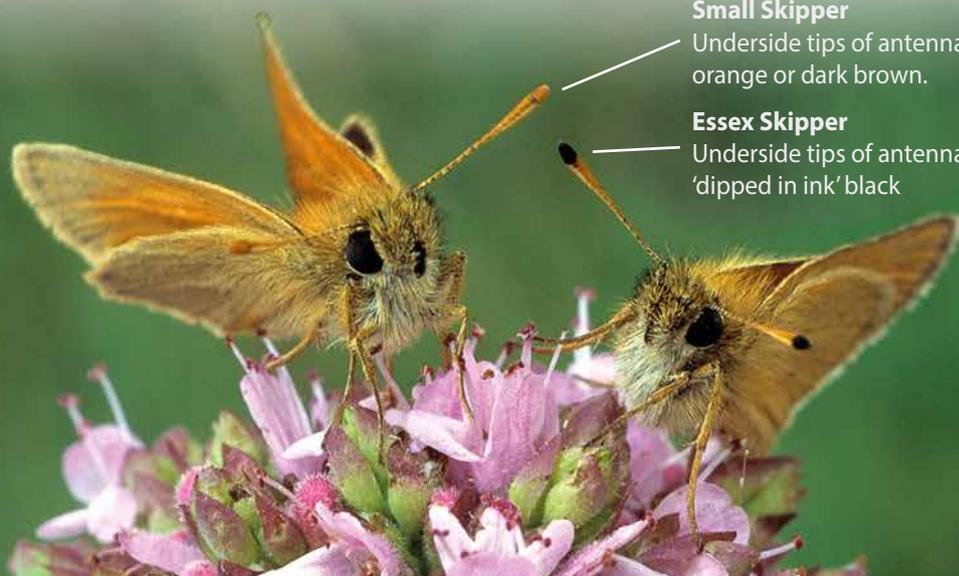
[Essex Skipper](#)
[Small Skipper](#)

Small Skipper

Underside tips of antennae orange or dark brown.

Essex Skipper

Underside tips of antennae 'dipped in ink' black



MEET THE TEAM

National co-ordination

Zoë Randle, WCBS Co-ordinator

e survey@butterfly-conservation.org

T 01929 406006

www.butterfly-conservation.org

Sarah Harris

(BBS National Organiser at BTO)

e bbs@bto.org

T 01842 750050

www.bto.org

BC Champions

BEDFORDSHIRE & NORTHANTS

Clare Topping

e ctopping@ratfox.net

CAMBRIDGE AND ESSEX: Cambridge

Vince Lea

e vincelea@btinternet.com

T 01223 263962

CAMBRIDGE AND ESSEX: Essex

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e rbigg50@btinternet.com

T 01245 423823

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T 01736 794134

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e c/o_survey@butterfly-conservation.org

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