

SUFFOLK BRANCH NEWSLETTER

The

Suffolk Argus

Volume 75

Summer 2019



**Butterfly
Conservation**

Saving butterflies, moths and our environment





Steve Goddard 1951 - 2019

Contents

Branch contacts	4	Sizewell C - A Prime Site for Lepidoptera	17
		<i>Rob Parker</i>	
Editorial	5		
<i>Trevor Goodfellow</i>		Garden Nectar Plants for Butterflies	20
Suffolk Moth Group	5	Black Hole	21
<i>Peter Maddison</i>		<i>Twm Wade & Bill Stone</i>	
In Memory of Steve Goddard	6	News-round	22
<i>Richard Stewart</i>		Event Report June 19	23
2018 Suffolk Butterfly Report	7	<i>Trevor Goodfellow</i>	
<i>Bill Stone</i>		Charaxes	25
SBR Annex A	15	<i>David Tomlinson</i>	
SBR Annex C	16		

14.30 hrs on Saturday 30th November 2019

SUFFOLK BRANCH AGM AND MEMBERS AFTERNOON

Venue: Stowupland Village Hall

Map Ref: TM070600

Post Code: IP14 4BG

The AGM will be followed by member's slides,
then light refreshments, the annual photo competition
and our guest speaker

Peter Eeles

In 2002 Pete created the acclaimed 'UK Butterflies' website and later 'Dispar', the website where papers are published. Pete has held various positions, including Chair, in the Hampshire and Isle of Wight Branch and in 2016 created BC's 'Garden Butterfly Survey' website. He is a recipient of the Marsh Award for the 'Promotion of Lepidoptera Conservation'.

Peter Eeles is writing the book *Lifecycles of British and Irish Butterflies* which is to be published this year.

Visit the informative UK Butterflies website www.ukbutterflies.co.uk

Further AGM details will be announced on the Branch website.

Suffolk Branch *Contacts*

President
Howard Mendel

Chairman
Peter Maddison
Barnmead, Fishpond Rd,
Waldringfield,
Woodbridge IP12 4QX
Tel: 01473 736607
email: prmaddison@yahoo.co.uk

Membership Secretary
Jillian Macready
Tel: 07980 208442
Email: jmacready@outlook.com

Treasurer
Kevin Ling
email: keving2013@aol.com

Secretary
Julian Dowding
84, Clapgate Lane,
Ipswich IP3 0RE
Tel: 01473 436096
email: julian.dowding@ntlworld.com

County Butterfly Recorder
Bill Stone
20, Langstons, Trimley St. Mary,
Ipswich IP11 0XL
email: butterflies@sns.org.uk

Transect and WCBS Co-ordinator
Twm Wade
email: twm.wade@yahoo.com

Conservation Officer (Butterflies)
Rob Parker
66, Cornfield Rd.,
Bury St Edmunds IP33 3BN
Tel: 01284 705476
email: robparker@waitrose.com

County Moth Recorder
Neil Sherman
email: moth@sns.org.uk
Conservation Officer (Moths)
Tony Prichard
email: tony.prichard@btinternet.com

Committee Members
Helen Saunders *Volunteers' Co-ordinator*
email: helens919@gmail.com
David Dowding
Adrian Richards
Matt Berry
email: matt@greenwings.co.uk

Website
Richard Perryman
email: richard.perryman@ntlworld.com

Newsletter Editor
Trevor Goodfellow
email: trevor@greenfarm.org.uk

Regional Officer, Eastern England
Sharon Hearle
Tel: 01638 484145
email: shearle@butterfly-conservation.org

The Suffolk Argus is published by the Suffolk Branch of Butterfly Conservation. The opinions expressed in this newsletter are not necessarily those of Butterfly Conservation or the Branch. © 2019 All rights reserved. For more information, see: www.suffolkbutterflies.org.uk

Butterfly Conservation
Company limited by guarantee, registered in England (2206468) Registered Office: Manor Yard, East Lulworth,
Wareham, Dorset, BH20 5QP Charity registered in England & Wales (254937) and in Scotland (SCO39268)

Editorial

Trevor Goodfellow

The advent of spring was dampened by the sad news of Steve Goddard passing away. Our thoughts are with his family at this difficult time. Despite not having known Steve, I am pleased that I mentioned him in the Spring Argus and drew attention to some of the valuable foundation work he did for Suffolk Branch BC. I hope he approved of our updated newsletter that he edited from issue one in 1994. (see page 6)

Our committee meeting was attended by welcome guests from BC HQ. After a busy day touring Suffolk with our chairman, Julie Williams (BC CEO & company secretary) and Victoria Webb, (office manager) were encouraged by SBC's enthusiasm and congratulated us on the style and variety of content of The Argus. Thanks to all The Argus contributors.

The big features in this issue are Rob's Sizewell C account and Bill's edited butterfly report.

Suffolk Moth Group

Peter Maddison

Tony Prichard, who has been County Moth Recorder for the last 20 years, has retired from the role and Neil Sherman has become the new Recorder. Tony has a wealth of knowledge of moth matters and much experience of committee work, borne of his membership of several natural history committees. We thank Tony very much for the time he has spent on the Branch Committee as Moth Recorder and we are very grateful for his contributions. We are pleased that, for the time being, he will remain on the Branch Committee as the County Moths Officer.

We wish Neil every success in his new role and to the Suffolk Moths Group, with whom we

look forward to a close and mutually beneficial association. In order to spread the workload, Neil will have assistance with data entry and report writing from some of the SMG members. A Facebook group 'Recording Moths in Suffolk' has been set up and a new Suffolk Moths Group website is in the offing.

Calendar events have been running well thanks to all the contributing volunteers, although more newcomers are welcome. Indeed, a few more volunteers would have been a great help at the King's Forest Dingy Skipper survey at Wordwell and North Stow (page 24).

Please accept my apology for omitting the Belgium map (page 27) which was referred to in Bill Stone's *P. Mannii* update in the spring issue 74.

More contributions for the autumn issue please, event reports and more about our previously neglected moths. **Copy date for the autumn Argus is 29th September 2019.**

Useful links: www.suffolkbutterflies.org.uk and www.flickr.com/groups/suffolk_butterflies/

(Front cover photo: Poplar-hawk by Trevor Goodfellow)

Keep up to date with the well-used Facebook page and the longer articles on the Suffolk Moths Blog, where in time it is hoped events will be published regularly.

<http://www.suffolkmothgroup.org.uk/blog/>

In Memory of Steve Goddard 1951-2019

Richard Stewart

It was fortuitous that our current editor, in volume 74, referred to the first edition of the 'Suffolk Argus' as part of our twenty-five years of celebration. Steve Goddard was the editor for the first thirteen editions and a pivotal figure in the early development of our Suffolk branch. His death at the age of sixty-seven was after a long debilitating illness aggravated in his last year by sepsis. During his editorship Steve contributed well over thirty articles, including editorials, ranging from the contents of his kit bag to garden moths, nettle feeding caterpillars and field trip reports. He was a particularly good observer of close and sometimes unusual insect behaviour. Our two houses in north Ipswich were about a mile apart and we had a long but friendly rivalry as to whose garden could host the most butterfly species. Steve had the considerable advantage of being relatively close to the 'green corridor' of the Ipswich to Felixstowe railway line and just a few months before moving house, he recorded a White-letter Hairstreak, his twenty sixth species and part of a long article entitled 'Goodbye Colchester Road' in volume 26. At the time of his retirement as editor the then Branch chairman, James Mann, commented on his 'hard work over the years when you have often not felt up to it' and added with foresight 'I am confident we have not yet seen the last article with the name Steve Goddard on it'.

Steve and his wife Anne, who became his official Carer, moved close to Martlesham Heath and ten volumes later Steve was reporting, from his garden and the rest of TM 2344, twenty eight butterfly species and nearly five hundred different moths, a remarkable achievement over such a short period of time and including rarities such as Silver-studded Blue and Broad-bordered Bee Hawk-moth. Steve was an all-round

naturalist, a regular attendee at BC field meetings and longer weekend trips to good butterfly areas outside Suffolk. While still working at GRE in Ipswich he would use his lunch hours to explore the nearby Alderman Canal and his expertise extended particularly to birds and 'damsels and dragons' with successful efforts to track down new colonising species. These even extended to early sightings of wasp spiders. Steve loved finding rare species, but he wasn't a 'twitcher', loving both the commonplace and the rare: as Ivan Lockwood remarked to me before the funeral service, Steve had told him 'Birdwatching is what you want it to be'.

In his later years, after illness forced him to retire from his job, Steve in his specially adapted car was still able to visit wildlife hotspots such as Minsmere and Landguard, both good for rare butterflies and birds, especially migrants. He was also a kind and generous person, arranging for entry at Landguard for four of us to try to find a rare butterfly and driving my wife Marie and I to Audrey Morgan's garden at Shottisham to see what is still, my only Death's-head Hawk moth. He was also generous in imparting his abundant knowledge and I can remember he spent time on a field trip explaining to Marie the differences between a common blue and azure damselfly.

His funeral, or rather celebration of his life, was well attended by many from the natural history world, some having selected bird or butterfly images to wear. There was a strong avian presence, from the decorated coffin to music, from Fairport Convention's nostalgic 'Who Knows Where the Time Goes' to 'The Lark Ascending' by Vaughan Williams and Fleetwood Mac's 'Albatross'.

It perhaps epitomised Steve's love of the countryside and all its beauty that our first meeting was at Tunstall Common, mainly to find White Admirals, and I last saw him in the great outdoors at Peewit Hill, Felixstowe, sitting on a seat and patiently hoping, like me, for a glimpse of a recently reported Large Tortoiseshell. Steve clung tenaciously to life despite his increasing health problems and even in the current edition of 'Suffolk Birds' he is listed among the recorders.

Perhaps a quote from the service is a suitable conclusion, originally said by Nathaniel Hawthorne: 'Happiness is like a butterfly which, when pursued, is always beyond our grasp, but if you will sit down quietly, may alight upon you'.



2018 Suffolk Butterfly Report

Bill Stone. County Butterfly Recorder

1. Introduction- The county butterfly report, as always, depends on the support of Suffolk's extensive network of local recorders and dedicated foot soldiers who go the extra mile each year (literally!) to extend coverage and understanding of our species. This year is no different and I extend my thanks to all those who have provided their records, undertaken the various surveys and supported further by exploring the numerous county recording black-holes. The conservation of butterflies depends on robust, diligent and determined recording efforts and Suffolk is one of the strongest to deliver this in the UK.

Some of Suffolk's most important records come from the focused and long-term surveys such as those run and overseen by the UK Butterfly Monitoring Scheme (UKBMS). These include transects and the 1km squares of the Wider Countryside Butterfly Scheme. On a local level, both UKBMS require local management and I am incredibly grateful to Twm Wade, Suffolk's

UKBMS Coordinator for his diligence and doggedness in maintaining the level of recording undertaken. This is not an easy role and requires constant engagement, communication and guidance to a network of nearly 75 recorders. Having just read the 2018 WCBS report it is significant to see Suffolk recorders remain in the top 10 counties for recording effort in this scheme. Please see the sections below for more details regarding the UKBMS schemes and locations in the county. Please try and get involved and support these surveys as opportunities always exist.

With the increase in on-line recording and use of social media I remain grateful to Richard Perryman for his professional management of the BC Suffolk website and the incredibly popular "Sightings" page. Richard's efforts ensure that this page is relevant, informative and essentially, up to date. I know from contact with not only UK based butterfly enthusiasts but, also as far away as Italy, Holland and Belgium that the sightings

page remains as an essential UK butterflies reference tool and gives a real feel as to what is happening in Suffolk.

Looking ahead, in 2019, we enter the final year of the current five-year recording period under the national Butterflies for the New Millennium (BNM) recording scheme. In this final year it is incredibly important to be as active as possible in exploring our county further and recording the butterflies seen. In the current 4-year period we have butterfly records for over 90% of the county so a little bit more exploring of the poorly recorded areas will be invaluable. However, if you are not able to explore the wilder and more remote parts of the county then please continue to support in any way you can. More local to home, the Garden Butterfly Survey continues to grow in popularity and the amount of garden and outdoor spaces is increasing each year. Whatever way you can record butterflies, I look forward to receiving your butterfly records for this significant final recording year and talking about this in the 2019 butterfly report.

2. Overview of the UK weather in 2018- The year was warmer than average for the UK, although not as warm as 2017. May, June, July and December were all much warmer than average. It was also a relatively dry year, particularly across the north of the UK, with June a very dry month in the south. This was a very sunny year, particularly May, June and July. Notable extreme events during the year included a spell of severe winter weather in late February and early March. The Met Office issued two Red

Warnings, and this was the most significant spell of snow and low temperatures for the UK since 2010. High pressure dominated the summer – the warmest for the UK since 2006, the driest since 2003 and the sunniest since 1995. Some rain gauges in southern England recorded more than 50 consecutive dry days and temperatures exceeded 30 °C fairly widely on 15 days during July and August. Nine named storms affected the UK during 2018. Storm Ali in mid-September brought very strong winds to the north and was one of the most notable early autumn storms of recent decades. Storm Callum in mid-October brought persistent heavy rain to western areas, especially south Wales.

The UK mean temperature for 2018 was 9.5 °C, which is 0.6 °C above the 1981-2010 long-term average, ranking as the seventh warmest year in the historical UK series from 1910. All top-ten warmest years in this series have occurred this century. Summer 2018 was equal-warmest in the UK series, with 1976, 2003 and 2006. The UK rainfall total for 2018 was 1064 mm, which is 92% of the 1981-2010 average, making this a dry year overall although not exceptionally so. However, parts of northern Scotland received only 75% of average rainfall. Southern England recorded its driest June since 1925. The UK sunshine total for 2018 was 1581 hours, which is 115% of the 1981-2010 average and making this the second sunniest year for the UK in a series from 1929, with only 2003 sunnier. East Anglia had its sunniest year on record. May was also the sunniest on record for the UK.

Season	Mean Temp	Anomaly	Sunshine	Anomaly	Rainfall	Anomaly
	Deg C	Deg C	hrs	%	mm	%
Winter 17/18	4.3	0.00	225.9	121	186.5	127
Spring	9.7	0.7	477.8	102	176.0	129
Summer	18.0	1.7	749.4	127	91.9	57
Autumn	11.5	0.6	428.9	132	136.6	76

Table: 2018 Weather for East Anglia

Source: www.metoffice.gov.uk

Anomalies are measured against the 1981-2010 averages.

3. Residents - Winners & Losers (Annex A- Scarcity for species seen in Suffolk in 2018

(see page 15)- The year will be remembered for the significant episodes of extreme weather. It started with the “false spring” which led to hibernating species such as Small Tortoiseshell, Peacock, Brimstone and Comma emerging from hibernation early in February & March. Immediately after, there was the protracted cold spell named by the media as the “beast from the east”. This effectively meant that many of those butterflies which had emerged early died with a resulting negative impact on their attempts to breed and the next generation was significantly reduced as less eggs were laid than normal. This was particularly noted with Small Tortoiseshell which for some was almost a rarity in 2018. Based on records received this species was only seen in 45% of the surveyed tetrads whereas in 2017 it was seen in over 60% of surveyed tetrads. It is a species in serious decline and has lost three-quarters of its UK population since the 1970s. Its absence was most noticed during the Big Butterfly Count (England) where it suffered its worst count on record being down by 40% on 2017.

However, later emerging Spring species such as Common Blue, Brown Argus, Small Heath and the whites all appear to have benefitted with adults emerging into the warm spring and with immediate access to nectar sources and their larval food plants. This generated strong first broods and helped with later broods. However, as the year moved on the prolonged sun and very warm temperatures started to have a negative effect on some species with numbers of very small individuals noted. This has been particularly evident with Common Blue, Small Heath, Holly Blue and Green-veined White. This is the consequence of both poor development and growth as a caterpillar due to parched food plants and the impact of hot temperatures on pupation.

This negative phenomenon may also account for dips in numbers seen in grassland species such as the Essex Skipper, Small Skipper and particularly Large Skipper along with Ringlet, Gatekeeper and Meadow Brown.

On a positive note, woodland-canopy species all appear to have done reasonably well and from records received seem to be much more widely distributed. This position seems to have been possible due to the settled late spring and the slow warm up into the summer coinciding positively at key points of life cycles. The hot dry weather also encouraged adults out of the canopy resulting in them being easier to see. This resulted in both Purple and White-letter Hairstreak being seen in almost twice as many tetrads as in 2017. Of note, however, is the increase in numbers of Purple Emperor seen with this species being noted in an additional 11 tetrads based on 2017 levels. The Silver-washed Fritillary continued its slow colonisation of the county increasing its tetrad count by 9 on 2017, however, it was only a very average year for White Admiral.

The most abundant species seen was Red Admiral at 5th position this despite a significant fall in numbers on 2017 totals, Gatekeeper at 4th, Meadow Brown at 3rd, Large White at 2nd and the Small White in 1st position. Of note, Large and Small White were seen in 75% of the tetrads surveyed.

2019 may be too soon to judge the consequences of the extreme weather events of 2018; it will probably be 2020 before the real impact is understood, both for Suffolk and the wider UK. That said the long-term trends remain of concern in that two thirds of the UK butterfly species show negative abundance trends and 21 of these species show significant decreases.

4. Early & Late (Annex C- Suffolk Butterfly Species Earliest and Latest dates up to end 2018 See page 16).

A review of Annex C provides for first and last records reported for each species seen in the year. This information sits alongside the Earliest and Latest dates recorded for each species as county records. Earliest county dates were recorded for several species in 2018 and included Clouded Yellow (16/04), Silver-studded Blue (16/05) and Chalkhill Blue (07/07). Meadow Brown records received provided new earliest and latest dates which in turn resulted in a flight season from 7th April to 15th October which is remarkable. The latest date is almost a week later than the previous record. Other latest dates recorded were for Large Skipper (25/09), Ringlet (27/09), Holly Blue (17/11) and Speckled Wood (18/11).

It is worth noting that the UKBMS Official Statistics for 2018 report stated that the “*mean flight date for the vast majority of species was earlier than the series average, with peak dates for many species advanced by a week or more. Also noted was the brevity of the season, with*

about two thirds of species showing a shorter flight period in 2018 than the average over both the past ten years and the whole series”. This was certainly noted in Suffolk for many species with the early end to the season brought about by the very dry conditions and loss of larval food plants simply dried up by the heat.

5. Migrants: In respect of migrants it was a relatively poor year for Clouded Yellow, Painted Lady and Red Admiral with numbers down by almost a third for Clouded Yellow and a quarter for both Painted Lady and Red Admiral when compared to 2017.

The Red Admiral continues to be treated as a migrant butterfly although it is clear that it is over-wintering in increasing numbers. This species can now be seen in all 12 months of the year with a resulting small UK population being swelled by immigrants from southern Europe as shown below.



Chart: Red Admiral flight period

The reduction in Red Admiral numbers seen in 2018 not just in Suffolk but throughout the UK may reflect the negative effects of the false spring and subsequent severe cold spell. Despite this short-term fall, the longer-term trend for this species is positive with an increase in abundance recorded. The 10- year trend shows a 45% increase with a 212% “highly significant” increase over the series trend (43 years).

Other migration noted and recorded during the

year involved numbers of Small White and Large White seen at coastal sites along with several records of these species along with Red Admirals seen at sea off the Suffolk coast.

6. Rarities: As in previous years Suffolk was lucky again to experience some rare and scarce butterflies alongside the regularly occurring migrant species.

Swallowtail: Three records, all singles, for this species were received:

2nd June in north-east Ipswich,

25th June at Loompit Lake, Levington

2nd July at Dingle Marshes, Walberswick.

Unfortunately, none were photographed but all were seen by reliable and experienced butterfly observers. It is difficult to assign the butterflies seen, without further details or photographs, to either the continental Swallowtail (*P. m. gorganus*) or the “British Swallowtail” subspecies (*P. m. Britannicus*).

Dark-green Fritillary: A single record of a Dark-green Fritillary was made at RSPB Minsmere on 23rd June. This was photographed and remained for most of the day allowing several people to enjoy it.

Long-tailed Blue: A single record was received of a Long-tailed Blue at Bixley Heath, Ipswich on 18th October. The butterfly was photographed which confirmed the identification and sex as female. (Of note, a male Long-tailed Blue was seen and photographed in 2017 at a nearby site in Ipswich but in July).

Large Tortoiseshell: A single record was received of a Large Tortoiseshell around farm buildings near Mutford on 4th July. This was photographed and confirmed as this species as opposed to the similar looking, but even rarer, Yellow-legged or Scarce Tortoiseshell. It is highly likely that Suffolk hosts more Large Tortoiseshells than are being reported, this is supported by the fact that it is being seen in slowly increasing numbers in coastal SE English counties and becoming more widespread in the near continent, particularly Holland and Belgium.

Camberwell Beauty: One record was received for the year and this was reported on 5th May from a location along the River Gipping between Badley and Needham Market. A photograph was also provided although little other details

are known about this sighting. As with other large butterfly species, the Camberwell Beauty, unfortunately, features in butterfly wedding releases. Singleton sightings such as this, therefore, need to be treated with caution.

7. Other species recorded.

Marbled White has been reported from various sites in west and mid- Suffolk. These do appear to be genuine wanderers from both Essex and Cambridgeshire populations. It is hoped that over time these pioneers will help to re-establish this beautiful butterfly species in the west of the county.

The Marbled White also continues to fly in central Ipswich at Landseer Park and nearby at Pipers Vale, Orwell Country Park. These butterflies originate from unauthorised introductions and information received suggest that they continue to be “topped-up” on a regular basis. The whole area remains “suspect” as other “oddities” reported from this local area in 2018 include Wood White, Dingy Skipper, Adonis Blue, “yellow” swallowtails and various black (presumed North-American.) Swallowtail species.

Brown Hairstreak was recorded again in the Pipers Vale and Belstead areas of Ipswich both from winter egg counts and flying adults albeit in much smaller numbers than seen in recent years.

The recording position on these presumed releases of Marbled White and Brown Hairstreaks at central Ipswich sites is that they will not be submitted to Butterfly Conservation for inclusion in national data sets. However, local monitoring will be undertaken, and records will be maintained at a county level in order to assess population and range changes.

8. Suffolk Biodiversity Action Plan- Priority Species- (see also <https://www.suffolkbis.org.uk/biodiversity/speciesandhabitats/specieslist>)

Seven species of butterfly occurring in Suffolk are deemed as UK BAP priority species. These are Dingy Skipper, Silver-studded Blue, White-letter Hairstreak, White Admiral, Grayling, Wall and Small Heath. These are all dealt with separately in annexes (D-J *).

9. Recording and Geographic Coverage in 2018- Butterflies for the New Millennium (BNM) remains the key recording scheme for general distribution and numbers of butterflies. The BNM aims to achieve comprehensive national coverage in successive five-year recording periods.

2018 was the fourth year in the current five year (2015-2019) recording period. Nearly, **35,000** records were received for 2018 and butterflies were recorded in **786** county tetrads (2km x 2km squares). In 2017, butterflies were recorded in 728 tetrads so 2018 actually saw records from an additional 58 tetrads. This is excellent and positively reflects my calls for additional coverage. So, overall, given that there are 1089 tetrads in Suffolk butterflies were recorded in approximately **72%** of Suffolk during the year.

However, as this was the fourth year of the current five-year period it is worth noting the extent of coverage achieved over the longer term. Combining the data from **2015, 2016, 2017 and 2018** shows that over **134,000** records have been received with butterflies being seen from **1005** county tetrads. This gives us an incredible **92%** county coverage which is a brilliant position to be in at the end of year four and places us in a very strong position going forward into the final fifth year. The **Suffolk coverage map for 2015-2018** is shown on page 27.

Analysis (ANNEX B- Long term trends for residents and regular visitors 1995 to 2018)- The **39** species of butterfly recorded in 2018 are shown in *Annex A*, in order of scarcity, with a direct comparison to last year's results. At a

glance, this shows a noticeable year on year increase between 2017 and 2018 for:

- Purple Emperor
- Purple Hairstreak
- White-letter Hairstreak
- Brown Argus
- Silver-studded Blue
- Small Heath

However, trends over a longer period are presented separately at *Annex B (*)* for our regular species. The latest rolling 5-year figure (2014-2018) covers **1029** tetrads and shows an average of **15.6** species per tetrad. Of note, long term analysis easily shows the slow but steady spread of Silver-washed Fritillary. Other species are holding their own whereas species such as Wall is slowly declining and its range within the county is becoming restricted. Furthermore, Dingy Skipper remains at a very low level and as such remains highly vulnerable especially given significant and ongoing forestry work within the Kings Forest.

10. UK Butterfly Monitoring Scheme (UKBMS)- Transects- Transects are very effective at monitoring habitat specialist butterflies and lowland semi-natural habitats. They are resource intensive but give a sharp view of butterfly trends. The 2018 results from those transects walked in Suffolk have been added to the Suffolk database and are a useful addition as they reflect consistent, sustained and focused recording within the county.

During 2018, **26** transects and **3** single species transects were monitored and these are listed below. My thanks go to all those team coordinators and walkers, who put in dedicated monitoring efforts at:

Suffolk Transects:

Site Name	
Alton Water	RSPB Lakenheath
Black Heath	RSPB Minsmere
Center Parcs (Elveden)	RSPB North Warren
Dunwich Forest 1	RSPB Wolves Wood
Little Ouse Headwaters	Sizewell Belts
Manor Farm (Coddensham)	Spring Lane (Bury St Edmunds)
NE Cavenham Heath	SWT Bradfield Woods
Newsons Farm (Thorpe Green)	SWT Church Farm
Newsons Farm Ext-(Thorpe Green)	SWT Lackford Lakes
Nowton Country Park	SWT Knettishall Heath
Ramsey/Hintlesham Woods	SWT Redgrave and Lopham Fen
River Lark Path	SWT Reydon Wood
Rookery Farm, Ousden	Upper Abbey Farm (Leiston)

Suffolk Single-species transects:

Site Name	Species
Blaxhall Common	Silver-studded Blue
Purdis Heath	Silver-studded Blue
SWT Bradfield Woods	Purple Hairstreak

11. UK Butterfly Monitoring Scheme (UKBMS)-Wider Countryside Butterfly Scheme (WCBS)- The WCBS complements transect monitoring of butterfly populations on semi-natural sites and forms part of an integrated approach to monitoring butterflies through the UK Butterfly Monitoring Scheme (UKBMS). It runs as a partnership between Butterfly Conservation, the British Trust for Ornithology (BTO), the Centre for Ecology and Hydrology (CEH) and the Joint Nature Conservation Committee (JNCC). The scheme targets common

and widespread butterflies by selecting random 1km squares which are then subject to a minimum of two visits ideally in July and August.

The records generated from the scheme are included in the Suffolk data set and represent a significant contribution both in terms of record numbers but also in respect of the locations involved. In 2018, records were received from the 35 squares as shown below. Disappointingly, four additional squares were surveyed but records were not submitted or lost.

WCBS – Suffolk 2018					
OS Reference	Org'	Name	OS Reference	Org'	Name
TL6381	BC	West Row	TM0871	BC	Gislingham
TL6545	BC	Haverhill	TM1234	BTO	Brantham
TL7163	BC	Gazeley	TM1666	BTO	Aspall
TL7262	BC	Dalham Hall	TM2144	BTO	Foxhall
TL7781	BC	Wangford	TM2147	BC	Playford
TL7866	BC	Risby	TM2160	BC	Creetingham (New 2018)
TL7951	BC	Hawkedon	TM2481	BTO	Shotford Heath
TL8161	BC	Ickworth (New 2018)	TM2975	BC	Cratfield
TL8271	BC	Wordwell	TM2984	BTO	St Cross, South Elmham
TL8566	BC	Fornham St Martin, Bury St Edmunds (N)	TM3150	BC	Eyke,
TL8778	BC	Barnham	TM3183	BC	St Margaret, South Elmham
TL8843	BC	Sudbury (N)	TM3388	BC	Bungay
TL8862	BTO	Rushbrooke	TM3450	BC	Rendlesham Forest
TL9047	BC	Acton, Lavenham	TM3549	BC	Rendlesham Forest,
TL9475	BTO	Bardwell	TM3762	BC	Benhall
TL9859	BC	Rattlesden	TM5075	BTO	Southwold
TM0048	BC	Nedging-with-Naughton	TM5195	BC	Flixton
TM0553	BC	Battisford			

There are a large number of WCBS squares available for adoption in Suffolk and if you are interested in getting involved with butterfly surveys then please consider this type of activity aspect. The Suffolk Coordinator, Twm Wade would be very pleased to hear from you.

12. Annexes

Annex A	Scarcity for species seen in Suffolk in 2018
Annex B	Long term trends for residents and regular visitors 1995 to 2018
Annex C	Suffolk Butterfly Species Earliest and Latest dates up to end 2018
Annex D	Dingy Skipper
Annex E	Silver-studded Blue
Annex F	White-letter Hairstreak
Annex G	White Admiral
Annex H	Grayling
Annex I	Wall
Annex J	Small Heath

*The full 2018 Butterfly Report, including maps, detailed annexes and year analysis tables, will be published in the next volume of Suffolk Natural History, Transactions of the Suffolk Naturalists' Society.

Annex A- Scarcity for 39 species seen in Suffolk in 2018

Tetrads per Species – 2017 & 2018 (Species listed in order of scarcity in 2018)

% of 728 Tetrads	2017 Tetrads	Species	2018 Tetrads	% of 786 Tetrads	*cf last
0.2	2	Camberwell Beauty	1	0.1	0.5
0	0	Dark-green Fritillary	1	0.1	0
0	0	Large Tortoiseshell	1	0.1	0
0.1	1	Long-tailed Blue	1	0.1	1.0
0.1	1	Chalkhill Blue	1	0.1	1.0
0	0	Swallowtail	3	0.3	0
0.9	7	Dingy Skipper	8	1.0	1.11
1.6	12	Silver-studded Blue	16	2.0	1.25
2.8	21	Wall	18	2.2	0.78
1.0	8	Purple Emperor	19	2.4	2.4
7.8	57	Clouded Yellow	38	4.8	0.61
6.3	46	Silver-washed Fritillary	55	6.9	1.09
7.2	53	Grayling	58	7.3	1.01
8.2	60	White Admiral	66	8.3	1.01
7.8	57	Green Hairstreak	67	8.5	1.08
5.2	38	White-letter Hairstreak	71	9.0	1.73
17.0	124	Essex Skipper	103	13.1	0.77
10.8	79	Purple Hairstreak	150	19.0	1.75
13.7	100	Brown Argus	174	22.1	1.61
32.4	236	Large Skipper	174	22.1	0.68
21.1	154	Small Heath	200	25.4	1.20
29.2	213	Small Skipper	201	25.5	0.87
41.4	302	Painted Lady	242	30.7	0.74
34.3	250	Small Copper	268	34.0	0.99
43.4	316	Brimstone	288	36.6	0.84
43.4	316	Orange-tip	311	39.5	0.91
37.5	273	Holly Blue	346	44.0	1.17
51.9	378	Ringlet	354	45.0	0.86
61.5	448	Small Tortoiseshell	356	45.2	0.73
63.1	460	Comma	378	48.0	0.76
42.7	311	Common Blue	395	50.2	1.17
51.9	378	Speckled Wood	416	52.9	1.01
48.3	352	Green-veined White	433	55.0	1.13
69.3	505	Peacock	461	58.6	0.84
75.5	550	Red Admiral	469	59.6	0.78
65.5	477	Gatekeeper	475	60.4	0.92
66.8	487	Meadow Brown	492	62.5	0.93
71.9	524	Large White	589	74.9	1.04
68.9	502	Small White	607	77.2	1.12

*cf last- Indicates change against last year's coverage when compared with current year.

Note 1: Swallowtail includes P. m. britannicus and P. m. gorganus

Note 2: Marbled White and Brown Hairstreak not included in comparison.

Annex C- Suffolk Butterfly Species Earliest and Latest dates up to end 2018

Species	2018 Earliest	Earliest in Suffolk	Recorder	Previous Earliest	2018 Latest	Latest in Suffolk	Recorder	Previous Latest
Swallowtail	02/06/2018	28/05/1997	Mervyn Bell		02/07/2018	28/08/1991	Ian Porter	
Dingy Skipper	06/05/2018	25/04/1990	W. E. Lemmon		28/05/2018	12/07/2017	Jenny & Gary Plank	
Essex Skipper	16/06/2018	29/05/1983	Stuart Ling		17/08/2018	14/09/2016	George Millins	
Small Skipper	10/06/2018	05/05/2017	Jenny Bradin		11/09/2018	25/09/1995	Stella Wolfe	
Large Skipper	21/05/2018	20/05/2017	Mervyn Crawford		25/09/2018	25/09/2018	Debs Crawford	18/09/2004
Orange Tip	10/04/2018	16/02/2015	Kerry Reeve		01/07/2018	21/07/2013	Ray Handinge	
Large White	22/03/2018	03/02/2014	BTO Garden Survey		31/10/2018	25/12/2011	Dave Langlois	
Small White	19/03/2018	11/03/2000	Graham Peck		15/11/2018	19/11/2006	Stuart Gough	
Green-veined White	21/03/2018	11/03/2000	Eileen Coe		20/10/2018	05/11/2006	Will Brame	
Clouded Yellow	16/04/2018	16/04/2018	Sue Cox	23/04/2013	02/11/2018	21/11/1992	Mr Richardson	
Brinstone	18/02/2018	02/01/2014	SWT Lackford		16/10/2018	28/12/2015	Betty Sargent	16/11/2011
Wall	10/05/2018	01/04/2009	Terry Peake		25/09/2018	01/10/2006	Lydia Calvesbert	21/09/2017
Speckled Wood	05/04/2018	10/03/2015	Reg Etheridge		18/11/2018	30/10/1995	Mick Saunt	08/10/2013
Small Heath	05/05/2018	22/04/2017	Linda Hammond		27/09/2018	10/11/2011	Reg Etheridge	
Ringlet	28/05/2018	24/05/2017	Twin Wade		15/10/2018	27/09/2018	Ray Handinge	
Meadow Brown	07/04/2018	07/04/2018	Meg Johnson	12/04/2018	27/09/2018	15/10/2018	Ray Handinge	
Gatekeeper	11/06/2018	20/03/2014	Michael Dickens		27/09/2018	06/10/2005	Lydia Calvesbert	
Grayling	18/06/2018	12/06/2014	Terry Peake		25/09/2018	01/10/2006	Steve Goddard	
Silver-vein Frillary	18/06/2018	13/06/2017	Mike Dean		17/08/2018	03/10/2014	David Dowding	
White Admiral	11/06/2018	06/06/2014	Brian Thompson		09/10/2018	17/10/2014	Paul Collins	
Purple Emperor	24/06/2018	23/06/2014	Two records		25/07/2018	26/08/2012	Julian Dowding	
Red Admiral	18/01/2018	01/January	Multiple records		29/12/2018	31/12/2006	Nick Dickson	
Painted Lady	21/04/2018	04/01/2016	Ian Bartholpe		08/11/2018	20/11/1995	Colin Hawes	
Peacock	12/01/2018	1st January	Multiple records		22/12/2018	31st December	Multiple records	
Small Tortoiseshell	16/02/2018	01/01/2000	A & E Beaumont		17/12/2018	28th December	Multiple records	
Comma	25/02/2018	15/01/1995	Stian Dumnic		02/12/2018	14/12/2016	Melvyn Eke	
Small Copper	05/04/2018	20/03/2010	Reg Etheridge		08/11/2018	16/11/1994	Richard Stewart	
Purple Hairstreak	16/06/2018	03/06/2013	Tony Pritchard		07/09/2018	27/09/2015	Dudley Sheppard	
Green Hairstreak	22/04/2018	30/03/2017	Mervyn Crawford		30/06/2018	23/07/2014	Richard Penyman	
White- I Hairstreak	22/06/2018	30/05/2015	Peter Smith		08/08/2017	11/09/2017	Bill Stone	
Holly Blue	15/04/2018	16/03/2017	Rose Andrews		17/11/2018	17/11/2018	Bill Stone	13/11/2011
Silver-studded Blue	16/05/2018	16/05/2018	Reg Etheridge	30/05/2011	25/09/2018	30/09/2007	Richard Hayward	
Brown Argus	17/05/2018	24/04/2004	Mervyn Crawford		25/10/2018	27/10/2008	Nigel Olin	
Common Blue	01/05/2018	06/04/2017	Christine Williams		31/10/2018	06/11/1994	Two records	
Chalkhill Blue	07/07/2018	07/07/2018	Twin Wade	13/07/2017	11/08/2018	28/09/2015	Twin Wade	

Sizewell C – A Prime Site for Lepidoptera

Rob Parker. SBC Conservation Officer (butterflies)

The idea of dropping two new nuclear reactors into a Site of Special Scientific Interest, an area of outstanding natural beauty (AONB) and a prime site for butterflies and moths is (fortunately) a once-in-a-lifetime issue.

The Government is keen to secure adequate dependable “green” energy for the long term and has contracted Energie de France (EDF) to build 2 new reactors alongside the existing site at Sizewell. We (your committee) were concerned about the impact of the construction work (as distinct to worries about nuclear safety), so we took part in the extensive consultation exercise that EDF conducted to ensure that local concerns were respected. We listed the species, and in particular the rare and vulnerable species that inhabit the area, and to consider their prospects in the face of such a disruptive project.

Other Conservation bodies – Natural England, RSPB, SWT and the AONB Partnership had their own concerns as owners or guardians of

important habitats, so it was natural that we should engage with those other agencies, with whom we would expect to share objectives, including measures we could propose that would mitigate the loss of habitat and temporary displacement of flora and fauna.

The artists impression (see below) shows the existing Sizewell B in brown (darker grey), and the projected Sizewell C in white. Landscape features, Kentwell Hills, Sizewell Belts and Goose Hill can also be seen. The pleasant walks and rich biodiversity have made it a popular destination for natural history enthusiasts, and this in turn has made it rather well recorded. Sizewell Marshes and Minsmere are off the picture to the north. The new roads & rail connections are not shown, but these will bring the tons of concrete and thousands of construction workers that are envisaged.

So, we assembled the relevant records, and created a short paper entitled:



Butterflies and Moths of the Sizewell Area

It was designed to assist our fellow conservationists as well as reporting our concerns to EDF. What follows is a simple precis of its contents. There are no outspoken views; it is simply a reference package showing which butterflies and moths fly in which tetrads.

Butterfly Population. Suffolk's 34 butterfly species (resident and regular migrants) are spread around the county unevenly. On average, each 2km square supports 15.3 species, but the Suffolk Coastal areas are better represented with over 20, whilst the squares around Sizewell B have 25, and are well monitored by two butterfly transects (Sizewell Belts and Upper Abbey Farm.) These are walked weekly from 1st April to the end of September. Long-term records show these to have 26 and 25 species respectively (The White Admiral lives in Kenton Hills but is not found on the Upper Abbey Farm transect).

Common Species. Our 22 wider countryside species are widespread, though no longer abundant. Their larval host plants are also widespread. If their breeding areas are covered in concrete or tarmac, one generation will die, but the species will probably survive in an adjacent field. If the concrete lies there for a decade, any surviving colony is likely to be much weakened.

UKBAP Species. Seven Suffolk butterflies are designated as UK Biodiversity Action Plan species. Their habitat requirements are relatively demanding, so they are more vulnerable. Six of the seven fly in the Sizewell area:

Silver-studded Blue flies on heather heathland in the Sandlings -just north of the Sizewell project area at Minsmere and just south of the area at Aldringham. Arguably it is not directly at risk from Sizewell C.

White Admiral flies in light woodland where honeysuckle flourishes. It breeds in small

numbers in and around Kenton Hills and Goose Hill. It is at serious risk of displacement by construction work.

Grayling has undergone a serious decline across England and in Suffolk, where it has abandoned its former flight areas in the centre of the county and moved towards the coast to find the sparse grassland on sandy soil that is its favoured habitat. For some years it has been quite common from Kenton Hills, through Sizewell Belts and particularly amongst the grass and shingle belt between the sea and Sizewell B. The work along the sea wall could be a significant threat to this declining species. The new access road and the permanent loss of a large part of Goose Hill will similarly reduce the available habitat for this vulnerable species.

Wall Brown has declined along the same lines as the Grayling and is now found only in coastal grassland (and at Carlton Marshes). It was once common along the Sizewell coast, but seems now to be absent. It is very unlikely to re-colonise Sizewell, particularly during the construction phase.

Small Heath is a UKBAP "study species" because the reasons for its recent decline are not properly understood. It still flies in the short grass areas around Sizewell B, but its health is unlikely to improve as a result of the construction work.

White-letter Hairstreak lives only in elm trees. It is seen occasionally in and around Kenton Hills. Given that some planting of trees will take place in that area during the re-instatement phase, it is suggested that consideration be given to planting some of the new disease-resistant strains of elm. This would be a gesture of mitigation towards our butterflies.

The Dingy Skipper is the 7th Suffolk UKBAP species, but is restricted to West Suffolk and is thus immune to any development at Sizewell.

Butterfly Records. The total butterfly species count for the 10 Km square TM46 is 27, including 6 UKBAP species.

Moths. Many noteworthy moths are found along the coast and inland to the Sizewell Belts. Full tetrad lists were presented. Many tetrads have records for over 200 species, and two have over 500, which is impressive (macro and micro moths together).

Moths of Note: BAP species, Rare and Nationally Notable:

White-mantled Wainscot: Associated with the dried areas of reed-bed where the larvae feed on Common Reed.

Fenn's Wainscot A species restricted to the reed-beds of East Anglia.

Monopis monachella A micro, restricted to the Suffolk coastline and the odd area in Norfolk. The larvae feed on animals' pelts, bird pellets, dead animals and bird's nests. Reed Dagger. A species associated with fen habitats; the larvae feed on common reed. **Broad-bordered Bee Hawk** moth. The larvae feed on honeysuckle in open areas.

Platytes alpinella. Frequents sandy and shingle habitats; primarily coastal but also occurs inland in the Brecks in Suffolk.

Nascia ciliaris A fenland species It is a rare species but may be locally common.

Water Ermine A scarce species of damp fenland habitats.

Webb's Wainscot A localised moth frequenting damp habitats- fens, marshes, ditches.

Flame Wainscot Occurring predominantly in some of the fens of East Anglia.

Shaded Fan-foot Inhabits bramble thickets in deciduous woodland.

Dotted Fan-foot A localised species of fens, with the larvae feeding on sedges.

Pauper Pug A rare species appearing in a few localities scattered over England and Wales. The larvae feed on Large-leaved Lime and Small-leaved Lime.

1. Impact on notable moth species.

The majority of the rarer moth species recorded in the Sizewell area are primarily associated with the wetter fenland and reed-bed habitats with a smaller number associated with the coastal sand and shingle habitats. There are also some species associated with deciduous woodland in Kenton Hills and Sizewell Belts. Disturbance of the fen and reed-bed habitats especially with changing of water levels is likely to affect these fen/reed-bed specialists. None of the rarer moth species are associated with coniferous habitat and in general this type of habitat supports a smaller variety of moth species.

The records presented show clearly what a rich share of Suffolk's lepidoptera are found in the vicinity of the Sizewell C development. The likely impact on their populations can be considered in 3 phases:

Preparation. EDF plans to present its planning application early in 2020 and anticipates a wait of 12 to 18 months before the application is approved. This time is an opportunity to consider possible mitigation measures to benefit wildlife, and to implement them ahead of the construction phase. The continuation of wildlife monitoring is important, and EDF can help by allowing unhindered access to wardens and those conducting the butterfly transects. Setting up monitoring arrangements for the water voles etc. at the new nature reserve at Aldhurst Farm is another worthwhile concession to our wildlife.

Construction. There will be damage to the

wild populations early in the construction phase, where new roads are built, car parks and hard storage areas replace natural vegetation, for example around the southern margin of Goose Hill. **Wildlife will be displaced.**

Construction – Timing - Impact. The construction phase is expected to take from 9 to 12 years. Most of the physical damage to habitat will occur in the early months. Fortunately, the EDF planners are taking note of the observations of the Wildlife agencies' observations, particularly where delicate habitat or UKBAP species are involved, and the most damaging options can be avoided. Nonetheless, the impact is clear; the entire footprint of the Sizewell C operational area will have been covered in concrete. There will have been a permanent loss of almost one square kilometre of prime habitat for flora and Lepidoptera.

Operational Phase. The final element of the construction work will involve the restoration of the land to agriculture generally and to its original condition where nature reserves, SSSI and public access can be restored. For example,

soil bunds may need to be levelled and planted. Conservation organizations have a role to play here, and Butterfly Conservation can advise on what to do in support of common species as well as the UKBAP species. When the site goes operational, nature will get its chance to restore its realm.

Mitigation. In mitigation for ground lost to nature, EDF have purchased Aldhurst Farm, which is now a nature reserve, catering particularly for wetland species like water voles, but potentially for lepidoptera too. The retention of Kenton Hills and the eventual creation of heathland on the unused parts of the EDF Estate is also helpful.

Summary. Three UKBAP butterfly species and 11 notable moths are presently flying in the relevant 2km squares. All of them are likely to suffer losses; most have some chance of recovering ground when Sizewell C goes operational.

This author reflects that the whole process looks like taking 15 years, by which time I shall be a 90-year-old armchair naturalist!

Garden Nectar plants For Butterflies - C is for Candytuft

Richard Stewart

This is an attractive garden plant of many different colours and either an annual or perennial, depending on the selected species. Its short height makes it ideal for the front of a sunny border and I also noted that Bill Stone referred to it as the larval food plant for the species he expects to colonise very soon-the Southern Small White. It flowers from summer to autumn and has the advantage of growing in thick clumps and retaining its foliage throughout the winter.

Like buddleia it can have an extended flowering by deadheading and it is possible to grow it in a container.

I must admit our patch though in a sunny spot isn't as extensive as in our previous garden, but it has so far provided nectar for the three whites, Small Tortoiseshell, Painted Lady, Meadow Brown, Gatekeeper and, many years ago, the Wall Brown.

Visit a Black Hole

Twm Wade & Bill Stone

What do you know about Black Holes? The ones in the cosmos I know very little about but the ones I am interested in are in Suffolk. These Black Holes are places where there are no records of butterfly sightings. They are an area of 2km by 2km, a tetrad and there are lots of them. Here is a sample that just covers the west of the county (VC26).

Grid reference – Information

TL5866 - Exning, 440 m2, old railway, road, scrub, no safe access

TL6246 – West of Withersfield, small area, access

TL6248 – North-west Withersfield, small area, poor access

TL6278 - Mildenhall, path east of the River Lark, access

TL6450 - Temple End Little Thurlow, North and South, path and road, good access

TL6466 - Exning, poor access, only along A14

TL6472 – West of Freckenham, about 90m of Beck Road only public access, poor

TL6642 - Haverhill, small area, path available south from Haverhill Hall, access

TL6648 - Great Thurlow, whole area, good access

TL6650 - Little Thurlow, whole area, good access

TL6662 - Moulton, part of 'the heath' at Warren Hill, poor access

TL6670 - Chippenham, access

TL6848 - Great Wratting, whole area, good access

TL6852 - Little Bradley, whole area, access

TL6854 - Great Bradley - good access

TL7042 - Wixoe, north and east of River Stour, access

TL7044 - Kedington to Boyton End, east of River Stour, poor access

TL7242 - Stoke-by-Clare, north of River Stour, poor access

TL7252 - Stradishall, good access

TL7254 - Cowlinge, good access

TL7257 - Lidgate and Ousden, good access

TL7264 - Gazeley - good access

TL7268 - Herringswell and Tuddenham, access

TL7450 - Hundon - good access

TL7476 - Eriswell - poor access

TL7486 – West of Brandon, south of River Little Ouse, access

TL7676 - Eriswell, poor access

TL7678 - Eriswell, poor access

TL7846 - Cavendish, good access

TL7854 - Stradishall, good access

TL7874 - Icklingham, access

TL7876 - Icklingham, good access

TL8044 - Cavendish, small part of area (<9 hectares) north of River Stour, access

TL8062 - Ickworth, access

TL8438 - Bulmer, good access

TL8440 - Bulmer, good access

TL8452 - Hartest, good access

TL8638 - Shalford Meadow, only 470m2 east of River Stour in Suffolk, no access

TL8658 - Great Welnetham, access

TL8836 - Workhouse Green, east of River Stour, access

TL8844 - Acton, good access

TL8846 - Acton, good access

TL9032 - Bures St Mary and Clicket Hill, north-east of River Stour, access

TL9034 - Bures St Mary and Bures Green, north-east of River Stour, access

TL9050 - Lavenham, access

TL9656 - Rattlesden, good access

TL9856 - Buxhall, good access

Some areas are very small, some have poor access but 20 have good access using public rights of way. It is a good idea to take a map that shows footpaths and a pencil and paper to make notes. All you need record is what you saw, where and when, then once home tell Bill Stone be email: billbutterfly68@yahoo.com. It should be a fun day out for all the family - a bit of a mystery tour without the bus.

And once you have 'been there, done that' you will have filled a Black Hole, the ones in Suffolk not the cosmos.

News Round

Insects' Massive decline

British Dragonfly Society 'Hawker'

'A global review hit the headlines recently with the shocking news that insects could vanish within a century at the current rate of decline. More than 40% of insect species are declining and a third are endangered, the analysis found. The rate of extinction is eight times faster than that of mammals, birds and reptiles. The total mass of insects is falling by a precipitous 2.5% a year, according to the best data available, suggesting they could vanish within a century'.

To the bat cave!

BBC4 TV

The 30 million Mexican free-tailed bats from Bracken cave in Texas, eat 250 tons of insects every summer night, most of which can be migrating masses of moths. Special radar imaging has shown that they fly up to two miles high to feed or to catch tailwinds that carry them over great distances, and can fly at speeds of more than 60 mph. In turn some bats are predated by birds such as grey falcon, bat hawk and brown jay but having very little effect on the bat population which serves to control insects,

imagine the swarms if the bats were not there!

The radar images shown on the BBC 'Life of mammals' reveals the massive flocks of bats accumulating at great height and intercepting the migrating swarms of moths.

Dukes of Kent

Woodland trust 'Broadleaf'

Claire Ward is leading a revival of the Duke of Burgundy in the Woodland Trust's Denge and Pennypot Wood. In association with the Duke of Burgundy Conservation Group and many volunteers, connective rides and woodland edges were cleared to help this beautiful little butterfly which peaked at 64 count at the Warren (Denge), double the count seen in 2010.

Great walls of fliers

Trevor Goodfellow

Anyone interested in dead specimens would like the display of exotic butterflies at the Turks Head near Woodbridge. In the dining room, the end wall is covered with attractive framed mounted butterflies which may not be to everyone's taste. However, the food served there might impress some, served by pleasant staff.

Event Report June 2019

Marlow's Home & Garden, 19th – 23rd April

Trevor Goodfellow

As a trial venue and set-up, the poor response and attendance has taught us a few lessons. The hosts were extremely accommodating but similar future events at Marlow's will be arranged slightly different to maximise visibility and hopefully footfall. (photo page 28)

Martlesham Creek and adjoining farmland, 2nd May

Peter Maddison

Three or four male Orange-tips made a bright start to this early-season walk as they flitted between nectar plants on the sunny path leading from the car park. A Speckled Wood was a little unexpected on the field edge, as was a Small Tortoiseshell, but that was owing to their vanishingly low numbers in 2018. The woodland leading down to the Creek was awash with bluebells and spring birdsong, then out on the causeway where Garlic Mustard grew quite profusely, several male Orange-tips were found. White-winged butterflies turned out to be Green-veined Whites, one of which, seen dangling from a plant, had been caught by a Common Crab Spider. A Peacock buffeted by the cool breeze sought shelter and nectar on the leeward slope river wall. We returned to the path through the wood and then out onto some fallow land where Dandelions coloured the slope. Here several Green-veined Whites, Peacocks and Orange-tips, both male and female were counted. On the gorse and broom of the meadow edge a Green Hairstreak hunt was made but with no success, we continued to the sheltered churchyard where several butterflies were counted but only a Holly Blue was added to the species list. This

was a good 2 hrs walk through varying habitats, enjoyed by the four who attended. It was a pity that more members didn't accompany us.

Spring Wood, 6th May

Kev Ling

An annual feature of Suffolk Butterfly Conservation's events calendar is the Spring Wood Celebration Day held at Kiln Meadow in Ipswich on May Day Bank Holiday. Organised by Greenways and supported by several wildlife conservation groups, it is the perfect opportunity to enjoy the bluebell carpeted wood and the varied wildlife that call it their home.

The run up to the event was looking promising for butterflies too. Green Hairstreaks adorned the hawthorn bushes near to the main display area (photo page 27) and male Orange Tips were busying themselves along the adjacent rides looking for females. With a scattering of overwintered species added to the mix, it was shaping up to be a good one.

Unfortunately, the weather gods had other plans. Sunny weather in the run up to the event, turned to cool cloud heavy skies on the day. A male Orange Tip was the only sighting in the briefest of bright intervals.

This however did nothing to dampen activities at the branch stand. In fact, despite event attendance being a little down on last years, glorious sunny day, it was perhaps the most public engaging day we had enjoyed there. The educational theme for this year's event was gardening for butterflies and we had many plants for sale to support this initiative. We were soon very busy handling sales and offering advice on how to attract butterflies to people's gardens. Emphasis was on encouraging larval activity and the trays of Birds Foot Trefoil

and Garlic Mustard went like the proverbial 'hot cakes'. We were also able to offer the public Cowslip, Fleabane, Knapweed, Field Scabious & Buddleia in order to promote nectaring and pollinating insects. We sold close to one hundred plants raising much needed funds for Butterfly Conservation. Most importantly though, it allowed us to engage with people of all ages to promote our work and ensure that they could all do their bit for butterflies and other insects. In addition to the plants we also had a variety of things to keep the children engaged, including Hawk Moth Pupae, Stag Beetle Larvae, Great Crested Newts and Grass Snakes.

Thank you to everyone who volunteered on the day and to the large number of visitors who helped make this such a successful event. Who needs the sun anyway! (photo page 28)

Black holes, 11th May

Rob Parker

The plan was to visit 4 black holes in the Haverhill area. Two dates were chosen - 11th May for spring species and 15th June for summer species. As the sites were unknown to the leader, it was necessary to plan on the O.S. map, and routes were devised - starting from pubs and walking through 2 tetrads on each day. In March, Myself & Alex set out for a reconnaissance, despite cool windy weather. The first leg was intended to use the Roman road marked on the map. The first hang-up was that the parking opportunities were awful, although a footpath sign pointed through a hole in the hedge saying, "Roman Road". We went through the hole to be faced by an immense field of oilseed rape - the intended route would have taken us straight across it. At least being there allowed me to choose an alternative footpath covering a slice of TL6246, and to identify a route into TL6248 - up a road promisingly named "Skippers Lane". One minor

consolation was that Alex spotted a Small White, so TL6246 is no longer a black hole!

When the planned date arose - 11th May, there had been only 3 enquiries about attendance, and belting rain necessitated cancellation. Hopefully weather will have improved by 15th June, and it looks as if we will be able to reach not just 2 tetrads, but 3. We start at Keddington. Be sure to be there!

Pakenham Water Mill, 12th May

Trevor Goodfellow & Peter Maddison

The sun shone down on us making a splendid day out for the crowds of visitors.

People of all ages were showing interest in the SBC stand (photo page 27) which featured information on garden lepidoptera, food plants and membership application.

Several plants were added to the remainder of the Spring Wood stock to include Phlox Buddleia and Sweet rocket. Nearly all were sold, raising some welcome funds for SBC.

Dingy Skipper Survey, 15th & 16th May

Bill Stone

15th. A total of 50 counted at Wordwell/Archery area despite extensive logging and log piles at last year's hot-spot sites. (photo page 28)

16th. Most were seen in forestry compartments and sheltered areas off the main Chalk Lane. In summary, a minimum of 22 Dingy Skippers were seen:

Chalk Lane (west)- 5,

Chalk Lane (central and north)- 8

Chalk Lane (central and south)- 6

Chalk Lane (east)- 3

11 other species seen during the survey and these were; Brimstone, Large White, Small

White, Green-veined White, Orange-tip, Green Hairstreak, Small Copper, Brown Argus, Peacock, Speckled Wood and Small Heath.

West Hall Farm, 17th May

Peter Maddison

Kindly invited by David Pettitt to visit his farm on the clay soils of High Suffolk, we jumped at the opportunity. A 40-acre meadow which has not been 'improved' since 1940 and an SSSI woodland of 80 acres were not to be missed, so it was disappointing that only four BC members, all of whom had committee associations, attended. It would have been good to see the numerous spring butterflies that the farm undoubtedly holds but overcast skies and a cool wind prevented in-depth recording. However, the potential of the site was clear and sightings from that lightly recorded part of Suffolk will be sought in the future.

Charaxes

David Tomlinson

Big, brash and brightly coloured, the Charaxes make up one of the most fascinating families of butterflies. Though they occur in south-east Asia and Australia, they are at their most diverse in tropical Africa, where hundreds of species occur. I have fond recollections of watching them in the Bwindi Impenetrable Forest in Uganda, but it was a frustrating experience as I didn't have a field guide so was unable to identify any of them. Much as I enjoyed seeing them, I'm one of those people who really likes to put a name to anything I encounter. So instead of butterfly watching, I concentrated on the birds, most of which I could identify. Even the birdwatching was interrupted on one occasion when a passing troupe of mountain gorillas wandered across the path in front of us, a memorable experience.

Sailors' Path, Aldeburgh to Snape, 18th May

Peter Maddison

Leaving the car at Snape Warren I made the early morning 2.5 mile walk along the Sailors' Path to the car park at Hazelwood Marshes. Too early for most butterflies to be on the wing although Small Copper obliged, and how good it was to hear Turtle Dove and Woodlark at Snape Warren. At the car park for Hazelwood Marshes just one member had arrived for the walk, another disappointingly low turnout. Overcast skies dissuaded butterflies from taking to the wing, but by late morning the sun had emerged and so had at least 8 species of butterfly, including Brown Argus, Small Copper, Small Heath, Green Hairstreak, Orange-tip, Small Tortoiseshell, Peacock and a sparkling male Common Blue as well as one or two unidentified whites.

Despite their abundance and variety in Africa, only one species occurs in Europe, *Charaxes jasius* (page 26 & 27), a stunningly handsome butterfly that has a suitably exotic English name: two-tailed pasha. It's restricted to the Mediterranean, but is commonly found wherever its food plant, the strawberry tree, grows. It is, however, quite localised, and I've struggled to find it in some places where I felt confident it should occur and have had surprise encounters elsewhere where I didn't expect it. Though its appearance is that of a typical Charaxes, its behavior is unusual, for unlike most of its African cousins it's not a forest butterfly but occurs in relatively open country.

It is, however, an unmistakably big, impressive

The Suffolk Argus

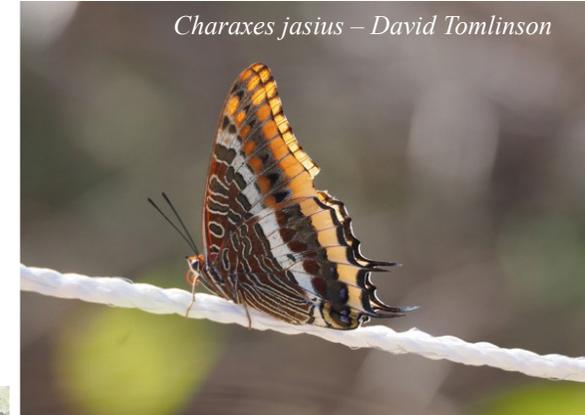
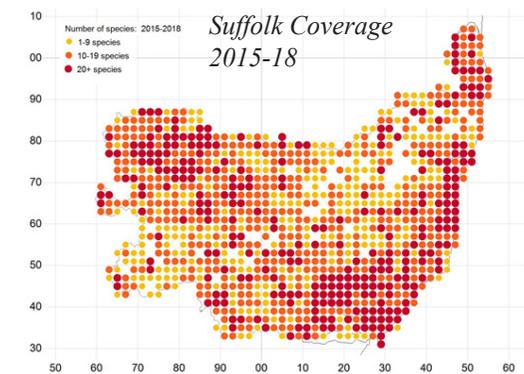
butterfly with a powerful flight, and like all the Charaxes is territorial, returning repeatedly to favourite perches. This makes it relatively easy to photograph, while individual butterflies are often bold and aggressive. A couple of years ago I was birdwatching in the mountains near Valencia (looking successfully for Bonelli's eagles) when I came across a particularly confiding pasha that landed repeatedly on my hat. This did make photography somewhat challenging, as the hat was on my head, but fortunately a companion snapped both the butterfly and me (page 27).

The two-tailed pasha flies in two generations, late spring and late summer. My hat-perching butterfly was a June individual, but my most recent encounter was in Menorca in early October. I'd glimpsed two or three pashas while driving around the island - they are big enough and obvious enough to be a butterfly you can

reliably identify when passing at 30mph - but I had been unable to stop to admire them. Then, one morning birdwatching near Son Bou, I came across an immaculate individual that in true Charaxes fashion posed for its picture to be taken. I had first photographed this species on Menorca a mere 40 years before, but my pictures were taken on black-and-white film, not a medium that does such a splendid butterfly justice. This time I was able to get the photographs I really wanted, including both top- and under-side, for like most big butterflies this is one that usually settles with its wings open. Handsome though it is with its wings open - it has exquisite blue dots close to its tails - it is the underside that is most attractive, and quite unlike any other European butterfly. This species is widely distributed in Africa as well as Europe, with five distinctive sub-species that can be found from Gabon all the way to South Africa.



Charaxes jasius – David Tomlinson



Charaxes jasius – David Tomlinson





Dingy Skipper - Survey - Wordwell 15th May



Dingy Skipper - Survey - Wordwell 15th May



Spring Wood May 6th



Marlow's Home & Garden April 22nd



Kiln Meadow - Green Hairstreak by Kev Ling