

NORFOLK BRANCH

Newsletter

ISSUE 95 | SPRING 2018



Butterfly
Conservation

Saving butterflies, moths and our environment



NORFOLK BRANCH - OFFICERS AND COMMITTEE

Chairman	Judy Dunmore
Treasurer	Walter Sadler
Deputy Treasurer	Roland Rogers MBE
Membership Secretary	Jennifer Griffiths
Conservation Officer & Catfield Fen Liaison	Mike Gasson
County Recorder	Andy Brazil
Transect Co-ordinator	Alan Dawson
Field Trip Organisers	Ann and Bob Carpenter
Events Organiser	Vacant
Publicity	Kiri Stuart-Clarke
Newsletter Editor	Mike Gasson
Secretary	Derek Longe
Moth Officer	Greg Bond
Webmaster & Twitter Co-ordinator	Neil Saunders
WCBS Co-ordinator	Christian King
Catfield Parish Liaison	Dr. Keith Bacon
Committee Members	Dr. Bernard Watts Jane Uglow Heather Goody

Norfolk Branch web-site www.norfolk-butterflies.org.uk

National web-site www.butterfly-conservation.org

Facebook: Butterfly Conservation Norfolk Twitter: @BC_Norfolk

Part of the cost of printing this newsletter has very kindly been donated in memory of Mr John Edgar Mallett, originally of Stiffkey. The extra costs incurred to print colour pages have once again been kindly donated by Roland Rogers.

**The opinions expressed in this newsletter are those of the author(s)
and not necessarily those of the Society**

Front Cover: Brimstone – see page 22 for Andy Brazil’s report on the timing of emerging hibernators and the new brood in 2017. Photo by Mike Gasson

Inside Front Cover: Norfolk’s contribution to the BC Conservation Day of Action. Clearing scrub (bottom) on the Cut-off Channel to create better habitat for the Dingy Skipper (top). Photos by Peter Lindsley (top) and Mike Gasson (bottom).

Chairman's Thoughts

Judy Dunmore

As I write this over the Easter weekend, the weather has once again turned very wet. When writing at this time in previous years I had already seen several species of butterfly. However, all I have managed this year are several Small Tortoiseshells nectaring on aubretia in my garden on sunny days, so it certainly looks as though we are likely to have a late spring. Cold, frosty winters have always been considered to be better than mild damp ones for insect populations. Only time will tell whether the cold spell in February was beneficial to butterflies or not.

You will have seen in the recent edition of Butterfly, this year Butterfly Conservation celebrates its 50th Anniversary. The Branch took part in the National Day of Action by holding a work party on part of the Cut-Off Channel near Feltwell to help Dinky and Grizzled Skippers. I hope to be organising some Skipper surveys on private land along this channel during May and would welcome some more volunteers – please contact me if you would like to take part. Also to mark this milestone, Ann and Bob have put together an even longer than usual list of Field Trips which I hope you will enjoy and Greg has organised several new sites for moth trapping sessions. I would like to extend a very warm welcome to all new members who have joined over the winter and encourage you to attend any of these events; please make yourself known to the leader.

Many of you receive monthly emails from our Membership Secretary highlighting up and coming events. If you are not receiving these, I would urge you to contact Jennifer; your details will not be shared with anyone else and will be held securely in an encrypted file. You will not be inundated with emails but it is an important way for us to keep in touch between Newsletters and also to be able to let you know of any last minute changes or additions.

We are still without an Events Organiser but I am pleased to say that we will be attending both Spring Fling, at Norfolk Showground in April, and Wild About the Wensum at Penthorpe in May. We have, however, had to turn down other opportunities to engage with the wider public, so if you feel you could take on this important role please contact me. Christian King has taken over the job of Wider Countryside Co-ordinator and will be in touch shortly with those of you who survey squares. If you are interested in getting involved please contact him.

The current recording cycle has only two years left. If you fancy a day out why not check the map (page 36), visit areas of the county you perhaps do not normally go to, and see what you can find. Andy will be talking on this subject at this year's AGM which will again be held in Hethersett. As usual there will be a photographic competition so let's hope for good weather. If you would like to share more of your photographs please consider coming along to one of the 'Show your Own' events held in December in Norwich and Blakeney in January. You will be amazed how good your pictures look on a large screen.

It just remains for me to hope for an excellent and interesting summer.

Norfolk Moth Survey Events

Saturday 24th June - Courtyard Farm, Ringstead. Meet 8.30 pm in the yard at TF729399

Saturday 1st July - Holt Country Park. Meet 8.30 pm in the car park at TG082375

Saturday 22nd July - Gramborough Hill. Meet 8.30 pm at TG081442.

Saturday 26th August - Brickyard Fen, Surlingham. Meet 7.30 pm at TG323061.

Organised in conjunction with the RSPB.

Field Trips and Events 2018

In addition to wearing sensible footwear it is also advisable to bring water to drink and a sunhat and sun cream should the weather be that kind to us. If the weather forecast is poor, contact the leader to check if the event is going ahead.

Wednesday 9th May: Blakeney Scout Hut HQ at 7.30pm

“A Greek Odessey – Butterflies of Northern Greece.” An illustrated talk by Ann Carpenter
Postcode NR25 7PQ – see website for map
Contact: Judy Dunmore: 01263 822550.

Saturday 12th May: Wild about the Wensum

We have a stand at this family event at Pensthorpe. TV presenter Nick Baker will be in attendance; charges apply (cheaper in advance). See website www.penthorpe.com for details.

Tuesday 15th May: Field Trip to Foulden Common 10.30am-1.00pm

Target species Dingy and Grizzled Skipper.

Directions: From Mundford take the A134 Downham Market road then right to Foulden, past Didlington Hall and left into Foulden village. Drive through the village to a T-junction and turn left towards Oxborough. The road bends round to the left and there is limited parking on the left at the entrance to the Common at TF7640 0003. It would be helpful if people could share lifts to keep cars to a minimum but there is more parking on wide farm tracks about 500m further down the road.

Contact Ann Carpenter: 01508 488337.

Saturday 19th May: Field Trip to Shouldham Warren 10.30am-1.00pm

Walk along woodland rides in this Forestry Commission Site to find early butterflies.

Directions: Meet in car park. North of the village, Grid Ref: TF 679 104.

Contact Ann Carpenter: 01508 488337.

Thursday 24th May: Field Trip to Mid Harling Heath 10.30am-1.00pm

Walk to find Spring emerging butterflies.

Directions: Meet at Forestry Commission Ride Entrance to Mid Harling Heath on Garboldisham Road between B1111 Junction and A1066 Junction. Grid Ref. TL 985 832.

Contact Ann Carpenter: 01508 488337.

Wednesday 6th June: Field Trip to Bure Marshes Nature Reserve, Woodbastwick. 10.30am-1.00pm

Walk round this nature reserve with the warden Will West to find swallowtail butterflies and other wildlife.

Directions: Meet Grid ref: TG 334 161. Turn left along private road through white gates at thatched cottages by stables on Ferry Rd, Meet by thatched buildings.

Contact Ann Carpenter: 01508 488337.

Sunday 10th June: Swallowtail Day at Wheatfen Nature Reserve from 10.00am

In conjunction with The Ted Ellis Trust – an opportunity to see Swallowtails, Norfolk Hawker dragonflies, Marsh Harriers etc. Guided walks all day. Reserve is tidal -wellies and insect repellent strongly recommended. Refreshments available. No charge, donations welcome. Sorry no dogs. Follow signs for parking at TG325057. Postcode NR14 7AL. Contact: www.wheatfen.org

Thursday 14th June: Breckland Moth and Butterfly Event St Helens, Santon Downham 9.30am

A new site for us specifically targeted at several of the Brecks speciality moth species. Meet in the St Helens car park along the track that runs parallel to the river from near the bridge and level crossing at Santon Downham. As usual we have the option of going on to search for day flying moths and butterflies Grid ref TL826874
Contact Greg Bond: 01263 579520.

Saturday 16th June: Field Trip to Carlton Marshes 10.30am-1.00pm

Walk round this flower studded marsh in the Waveney Valley owned and managed by Suffolk Wildlife Trust looking for summer butterflies and other wildlife.
Directions: Meet in reserve car park, near visitor centre, at end of Burnt Lane Carlton Colville (the gate will open). Grid Ref; TM 508 921
Contact Ann Carpenter: 01508 488337.

Sun 17th June: Catfield Open Day

Our Catfield Reserve will be open to members and the public for Swallowtails and moths. Moth traps will be opened in the car park at 9.30am. Water levels permitting there will be guided walks at 11am and 2pm. Unaccompanied access is only possible along the Rond on the western and southern fringes of the Reserve. Parking by kind permission of Dr and Mrs S Holburn at TG369215, Postcode NR29 5DD. No dogs please. Wellies and insect repellent highly recommended.
Contact Mike Gasson: 01328 829307 for general information or Moths Greg Bond: 01263 579520.

Thursday 21st June: Field Trip to Bradfield Woods IP30 0AQ 10.30am-1.00pm

Walk round this ancient woodland, owned and managed by Suffolk Wildlife Trust looking for summer butterflies. 24 species have been recorded. Paths can be uneven so sensible footwear is advisable.

Directions: Meet in car park at entrance to wood. Take A134 south from Bury St Edmunds turn left to Little Welnetham and Bradfield Wood is on RHS between Bradfield St George and Felsham. Grid Ref: TL 935 581. Contact Ann Carpenter: 01508 488337.

Sunday 24th June: Field Trip to Buxton Heath 10.30am-1.00pm

Walk round this Hevingham Fuel Allotment Charity Site, which is managed by NWT, looking for Silver-studded Blues. Paths can be damp and uneven so sturdy footwear advisable.

Directions: Meet in Reserve car park off B1149 Approx 5 miles North of Norwich Airport on Horsford – Holt road. Grid Ref. TG 171 214. Contact Ann Carpenter: 01508 488337.

Sunday 1st July : Moths and Butterflies Abbey Farm Flitcham PE31 6BT 10.00am

We have again been invited to open moth traps at this excellent farm in north west Norfolk for the farms open day. Last year we captured a number of interesting and colourful species so there should be plenty to see for specialists and families and children alike. We will be near the main farmhouse from 10.00am and weather permitting we will also be leading a couple of butterfly walks at 11.00am and 2.00pm around this otherwise private estate. Refreshments will also be on sale at the farm during the day. Grid Ref TF736267. For more information re Open Day please contact Ed Cross ejc@abbeyfarm.co.uk or for specific information regarding BC participation contact Greg Bond: 01263 579520.

Tuesday 10th July: Foxley Wood Moth opening 9.30am; Butterfly Walk 11.00am approx until 1.00pm

After the successful visit to this site in 2017, we will again be opening moth traps put out the night before courtesy of NWT. A Butterfly walk will follow looking for summer butterflies including White Admiral. Paths may be damp and uneven so sturdy footwear is advisable. Directions: Meet in car park Grid Ref. TG 049 229.

Contact Greg Bond (moths): 01263 579520; Ann Carpenter (butterflies): 01508 488337.

Saturday 14th July: Field Trip to Beeston Common, Sheringham 10.30am-1.00pm

Walk round this fine reserve looking for early summer butterflies and other wildlife. The ground can be very damp and uneven so sturdy footwear is advisable.

Directions: Meet in lay-by on A149 in Sheringham. Grid Ref. TG 166 425.

Contact Ann Carpenter: 01508 488337

Wednesday 18th July: Holt Country Park 11.00am–12.30pm

A joint field trip with NWT members to look for White Admirals, Silver Washed Fritillaries etc. Weather permitting, there will be an opportunity in the afternoon to visit Holt Lowes to search for other species and dragonflies.

Directions: Meet in Car park. Grid Ref; TG 084376. There is a charge.

Contact Ann Carpenter~ 01508 488337.

Wednesday 25th July: Pigney's Wood, Knapton 10.30am-1.00pm

Walk round this North Norfolk Community Woodland now managed by Norfolk Wildlife Trust looking for summer butterflies and other wildlife.

Directions: Meet in the wood's car park. Grid ref; TG 296 324.

Contact Ann Carpenter: 01508 488337.

Thursday 26th July: Breckland Moth Event, Weeting Heath 9.30am

Our second visit to the Brecks this time looking for summer species in the general area of Weeting Heath. Please note that owing to car parking limitations at Weeting we will be meeting in the car park at Cranwich Camp TL774940. As usual we have the option of going on to search for day flying moths and butterflies. Contact Greg Bond: 01263 579520.

Wednesday 1st August: Moth event Hoveton Hall 9.30 am

A new location this year. Hoveton Hall Gardens is signposted off the A1151 just north of Hoveton. Park in the visitors car park at TG312200. There is a Café and toilets. We will be opening the traps in the walled garden which is just a short walk down the drive. Some parking will be available next to the walled garden. The site includes extensive gardens, mixed woodland and parkland with a 4 acre lake. Contact Greg Bond: 01263 579520.

Thursday 2nd August: Horsey Gap 10.30 am-1.00pm

Walk round this Natural England Reserve looking for summer butterflies including Grayling and Dark Green Fritillary. Paths can be very uneven so sturdy footwear is advisable. Directions: Meet in car park for which there is a charge, Grid ref; TG 464 242.

Contact Ann Carpenter: 01508 488337.

Sunday 5th August: Butterflies in the Park, Eaton Park, Norwich 11.00am–3.00pm

Visit our stand near the circular herbaceous borders where we hope to have some moths on display from the previous night's trapping. Last year we found 13 butterfly species in the park – help us try to equal or better this number and take part in the Big Butterfly Count.

Refreshments are on sale in the Park Café. Contact Alan Dawson: 01603 454092.

Friday 10th August : Long’s Wood, Wreningham 10.30am-1.00pm

Walk round this maturing wood looking for summer butterflies and other wildlife.
Directions: Meet in car park on the Silfield to Wreningham road. Grid Ref: TM144 995.
Contact Ann Carpenter 01508 488337.

Thursday 2nd August: Magical Moths at Cley NWT

Thursday 23rd August: Magical Moths at Cley NWT

10.15 am with moth trap opening at **11.15 am** on each of the above dates

Held jointly with NWT, after a session for children (and accompanying adults) in the new Visitor Centre to learn about the fascinating lives and behaviour of moths we will then be opening traps for the general public giving everyone a rare opportunity to see these incredible night flyers up close.

Please note NWT will be making a small charge for this event – please check with them for further details.

Directions: meet at the Visitor Centre east of Cley village on the coastal A149.

Contact Greg Bond 01263 579520 or Cley NWT on 01263 740008.

Wednesday 5th September: Blakeney Scout Hut HQ at 7.30pm

‘Tanzania - a safari full of birds and mammals’ An illustrated talk by Greg Bond
Postcode NR25 7PQ – see website for map. Contact Judy Dunmore: 01263 822550.

Saturday 29th September: Members Day and AGM

See page 17 for details.

Wednesday 7th November: Blakeney Scout Hut HQ at 7.30pm

‘Tibet - Wildlife on the roof of the World’ An illustrated talk by John Geeson
Postcode NR25 7PQ – see website for map. Contact: Judy Dunmore: 01263 82255.

Friday 7th December: United Reform Church, Ipswich Road, Norwich at 7.30pm

A chance to show your butterfly, moth and other wildlife photos from 2018. A laptop, digital projector and speakers will be available.

The Hall is south of the ring road, access via Lyhart Road. Postcode NR4 6QR - see website for map. Contact: Andy Brazil Tel: 01603 920584.

Moths Matter

Greg Bond

The year started brightly with a number of reports of early species such as Spring Usher, Early and March Moths, Oak Beauty, Common Quaker, Pale Brindled Beauty and particularly Yellow Horned and Small Brindled Beauty, which occurred in good numbers in several sites. Notable species reported at this time were a couple of Dotted Chestnuts which is slowly colonising Norfolk but still has less than 100 records here, *Acleris kochiella* with less than 30 County records and several reports of leaf mines for *Ectoedemia heringella*. There are still less than 100 records of this species in Norfolk but these records show the value in looking for leaf-mines to our understanding of the distribution of moths which rarely show up in light traps.

This all looked very promising until mid-March brought “the Beast from the East” followed in short order by the “mini Beast from the East” with record low temperatures, fierce gale-force easterly winds and some of the deepest snow in a very long while. It was however in the gap between the two meteorological events that the notable species

mentioned were recorded showing moths at least can be pretty resilient creatures. Despite the apparently continuing cold weather towards Easter mild weather is on the way so if you are reading this article now would seem like a good time to dust of your MVs, actinics and others, if you've not already done so.

This year sees the publication of a number of potentially land mark books, our County Recorder Jim Wheeler's checklist of Micro Moth Vernacular Names and later in the year Butterfly Conservation's Macro Moth Atlas for Britain and Ireland. The former is intended to make the recording of micro moths more popular by substituting English names for scientific ones to make them more accessible, which is to be generally welcomed. The second is the final result of all those records we have been sending in over the years – you have, haven't you! They will give us all a clearer understanding of what in general occurs where, at least at the point in time of the last records included. Both I think will be valuable additions to personal libraries though with Jim's sterling effort doubtless causing a lot of debate amongst the mothing fraternity, but that's no bad thing if it encourages recorders to report micro-moths more extensively.

Photographic Competition 2018

The popular photographic Competition will again be held during the branch AGM on 29th September (see page 17). Everyone attending will be encouraged to vote and the winning entries will be announced on the day. Entry details follow:

1. There are two entry categories with a prize for both winners
 1. **British Butterflies and Moths, including immature stages.**
 2. **Overseas Butterflies and Moths, including immature stages.**
2. All entries must have been photographed during 2018.
3. Entries must be prints up to A4 size (297 × 210mm) including any mount.
4. Mark the reverse of entries with your full name, address, information on the subject and which category is entered.
5. You are limited to a maximum of three entries in each category.
6. Postal entries should be submitted to the address below to arrive by 22nd September. They can be collected after the competition at the AGM but will not be returned by post unless a stamped addressed envelope is provided with the entry.
7. Entries on the day of the competition must be provided 20 minutes before the start of the meeting.
8. Some entries will be published in the branch newsletter. Postal print entries can be scanned but it will be helpful to have digital files sent to the Newsletter Editor at: moorend@globalnet.co.uk. For entries submitted on the day to be considered for publication digital files must be provided.
9. By entering the competition you agree that your photographs can be used in the branch newsletter or on our website. Photographer credits will be given.

Contact details for enquiries and postal entries:

Mike Gasson, Moor End Cottage, Moor End Lane, Stibbard, Norfolk, NR21 0EJ
tel.: 01328 829307 email: moorend@globalnet.co.uk

Do you live around Thetford?

Sharon Hearle, our Regional Officer, is organising two public butterfly and moth opening events south of Thetford in the Kings Forest. This is part of the Shifting Sands Project mentioned in the recent copy of Butterfly and supported by the Heritage Lottery Fund. She will be setting five moth traps overnight and after these have been opened there will be an optional three mile walk to record butterflies and day-flying moths. The site is in Suffolk and the event is primarily aimed at the general public to encourage interest in butterflies and moths. However, it is an excellent opportunity for anyone living in this part of Norfolk and you are very welcome to go along. Sharon would also welcome any experienced 'mothers' who would be prepared to help on the day.

Details: Thursday May 10th and Friday May 18th 10.00am-2.00pm

Meet: Kings Forest Picnic Site Car Park opposite ride 203 just off B1106 Grid Ref: TL825747. Approximate postcode IP28 6UY (Ticks are present in Kings Forest so wear suitable clothing that covers feet, arms and legs).

Please contact Sharon to confirm attendance. shearle@butterfly-conservation.org

Norfolk UKBMS Transect Recording in 2017

Alan Dawson, Transect Coordinator

The last two years of transect recording in Norfolk have been rather depressing, with 2016 being even worse than 2015. However in 2017 things improved quite a lot. The Spring was much warmer and not as wet as in 2016, and overall the index for butterfly sightings (total sightings corrected to 26 weeks) increased to 45678 (an interesting number to arrive by chance!) from 41 full transects. This compared with 36097 from 38 transects in 2016. The good weather early in the year seems to have had a large effect on flight times. Fig 1 shows the total butterflies counted by week in 2017 alongside the numbers for 2016. As always, Week 1 starts on 1st April. The peak number recorded was in Week 14 (first week of July) compared with the third and fourth weeks of July in 2016. However, while early, the season was short, with numbers much below 2016 levels by about week 17. This was probably largely because of the early disappearance of Meadow Browns and Ringlets, which had mostly vanished by the end of July.

Full 26 Week Transects

Given the hard work and commitment involved in recording a full transect for the whole season, it is not surprising that every year there are some that do not get done. This year, the walks at Pensthorpe, Holt Country Park, Sculthorpe 2 and Weeting could not be done, although it is hoped that they will resume in the future. Additionally we abandoned the transect for Dingy and Grizzled Skippers at Narborough Railway line, given the absence of records for the last few years. If we get reports of Skippers flying there in the future we might start it again, but meanwhile we decided to monitor the Dingy Skippers at Lynford Water instead. Happily this turned into a full 26-week, all-species transect because it is also an important site for Grayling. Other new full transects were at Quidenham, Orchard House, Bintree Wood and East Ruston Common (the latter being notable for having Silver-studded Blue on transect). Another piece of good news was that the transect at Cranwich Camp, which has had to be abandoned due to impassable bracken growth in the past, was rescued this year by the good offices of NWT and the Forestry Commission who installed a stile to bypass the affected area. Altogether, 41 full transects were done this year (38 in 2016).

Table 1 shows the annual summary for the full 26 week transects. The software on the UKBMS recording system corrects for weeks when no walk was done, so results should be comparable across the different transects and between years. However, where not many walks have been completed the estimated numbers may not be reliable. The total number of species seen was 34 (32 in 2016). Chalkhill Blue, previously seen at Ringstead Down, was not seen this year, but White-letter Hairstreak and Dingy Skipper were back on the list, and Silver-studded Blue was recorded at East Ruston. A Swallowtail was recorded at Ludham Marshes for the first time and the new transect at Bintree Wood added another site for Silver-washed Fritillary.

Table 2 is the Winners and Losers table for 2017 compared with 2016, based on the 35 transects that had comparable data sets for the two years. As usual, I must issue a health warning about this data because for some species the number of records is quite small and for others the number of sites where the species was recorded is small. However, while in 2016 the numbers for most species showed declines, at least for 2017 more species show positive changes than negative. Some species, notably Silver-washed Fritillary, Swallowtail, Red Admiral, White Admiral, Wall, Small Tortoiseshell and Comma had very good years. The big loser was Grayling (see section on Red-List Species below), but Brown Argus was also in trouble. While 2016 was a particularly good year for Grayling, the 2017 total is still very low historically.

Single-species transects

Single-species transects are only walked during the flight season of the relevant species, and the numbers are not included in Table 1 but are reported in the following section on Red-list species. As in previous years, we had single species transects for Swallowtail at Wheatfen Broad, Catfield Fen, Strumpshaw Fen and Ranworth Broad. There was a transect for Silver-studded Blue at Buxton Heath and one for Dingy and Grizzled Skipper at Foulден Common. As already mentioned, the transect at Narborough Raliway Line was abandoned in favour of a full transect at Lynford Lakes.

Red-list Species

Nine of the ten red-list species in Norfolk were recorded on transect in 2017:

- Dingy Skipper: 59 at Foulден (43 in 2016); 24 at Cranwich (27 in 2016), 41 at Lynford.
- Grizzled Skipper: Seven at Foulден (31 in 2016); the general picture for this species in Norfolk is not good, with sites having been lost over the years.
- Silver-studded Blue: 393 at Buxton Heath (407 in 2016); 346 at the new transect at East Ruston. Numbers seem to be holding steady.
- White Admiral: Recorded on 13 transects (11 in 2016): Bure Marshes, Holkham, Tomas's Pightle (new for 2017), the three Swanton Novers transects, Sutton Fen (new for 2017), Dersingham Village Railway Line, Dersingham Bog (new for 2017), How Hill, Foxley Wood, Reffley Wood (new for 2017) and Bintree Wood (new transect). Although Gaywood Valley missed out this year this species seems to be doing well (see also Table 2).
- Wall Brown: Seen at 10 sites (same as 2016): Winterton Dunes and Natural Surroundings were new sites and Courtyard Farm was back on the list after a year's gap. Redgrave and Lopham Fen and Roydon Common missed out this year. However, numbers were much better overall than last year, which makes a welcome reversal of the big declines seen in 2015 and 16.

- Grayling: Five sites (4 in 2016). Lynford Water was a new transect where good numbers of Grayling were recorded. However, the picture at the previous strongholds at Winterton Dunes, Scolt Head and Blakeney Point is pretty grim, with only Holkham bucking a very serious downward trend (see Table 2).
- Small Heath: Seen at 13 sites (11 in 2016). There was a substantial overall increase in numbers compared to 2016 (see Table 2).
- Chalkhill Blue: No records on transect this year – in past years small numbers have been counted at Ringstead Down and Cranwich Camp. Numbers at Warham Camp were similar to 2016, dramatically down from the 2015 level (see the previous Newsletter for more detail).
- Swallowtail: Yet another site was added to the Swallowtail transect list when one was recorded at Ludham Marshes. The numbers counted over the last few years are shown in Table 3 and it is excellent news to see Swallowtail figuring near the top of the leader-board for winners in 2017 (Table 2).

Outlook for 2018

We have been doing very well in Norfolk, increasing the number of transects steadily over the years. Hopefully this will continue in 2018 – we are already in the process of setting up a new transect at Blickling Hall, courtesy of the National Trust. On that topic, this is an appropriate time to thank all the Norfolk (and Suffolk) wildlife organisations that manage so many of the important sites that we monitor for UKBMS. As they say in ‘Strictly Come Dancing’, in no particular order: Natural England, Forestry Commission, RSPB, NWT, SuffolkWT, Broads Authority, Holkham Estates, Ted Ellis Trust, Butterfly Conservation, Norwich City Council, North Norfolk District Council, Hawk and Owl Trust, National Trust and the numerous charities that administer the heaths and commons in Norfolk. Apologies if I have missed any, but as you see we are in debt to a very large number of organisations.

The whole UKBMS transect system hinges, of course, on the dedicated band of recorders who manage to fit weekly walks in around the weather and all the other things that they have to do. They have my heartfelt thanks. As a rough calculation, I think the total distance walked on Norfolk transects during 2017 was about 2500 km. We are always on the lookout for volunteers, both for new transects and to act as backups for existing transects, so if you feel you would like to get involved, please contact me.

Figure 1: Overall Numbers in 2017 Season Compared with 2016

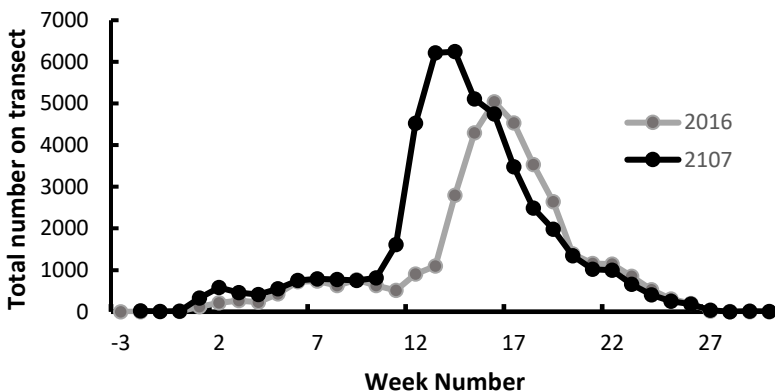


Table 1: Norfolk Transect Data as Indices (corrected to 26 weeks)

	Bure Marshes	Holkham	Holme Dunes	Mousehold Heath	Mousehold Heath East	Blakeney Point	Winterton Dunes	Strumpshaw Fen	Marston Narsh	Scott Head Island	Tomas' Pightle	Swanton Novers 1	Swanton Novers 2
Small Skipper		35			4	2	7		8	63		1	
Essex Skipper			1	4	10				11		16		
Sm/Es Skipper			75	9	23		4		134	1		83	16
Large Skipper	16	12	4	2	11		3	6	12			15	1
Dingy Skipper													
Swallowtail	51							4					
Clouded Yellow	1												
Brimstone	132	2		6	3	1		75	15		14	31	10
Large White	2	100	4	68	56	1	7	42	9	29	51	22	14
Small White		17	42	26	32	2	7	17	6	23	35	24	5
Green-v. White	258	37	3	34	43			105	314	14	31	67	52
Orange Tip	8	26		13	19			37	33		15	12	
Green Hairstreak		1		12	11					57			
Purple Hairstreak		5		6	13								
White-letter H/s													
Small Copper		49	6	14	35	26	24		27	7		5	
Silver-studded Blue													
Common Blue		103	81	5	27	6	4	3	12	317		5	
Holly Blue		33		34	10			8	3		19		
Brown Argus		38	7		5	1							
Chalkhill Blue													
White Admiral	2	17									1	1	3
Red Admiral	49	289	44	22	30	25	4	72	26	77	32	17	11
Painted Lady	2	55	6			18				48	8	8	1
Sm. Tortoiseshell	76	37	68	11	31	2	5	126	98	106	30	7	1
Peacock	74	117	21	20	6	2	8	104	37	24	41	27	19
Comma	32	45		52	68		1	22	19		17	18	7
S-w. Fritillary		12										115	21
Dark G. Fritillary		64				2	6			12			
Speckled Wood	33	18	8	99	54		6	16	11		24	74	123
Wall Brown		105	59				2			87			
Grayling		40				1	170			26			
Gatekeeper	8	101	53	40	97	10	106	34	82	407	131	65	30
Meadow Brown	118	276	176	96	233		36	121	546	387	25	157	103
Small Heath		10	40				70			450			
Ringlet	100	146	54	31	79	2	26	32	84	25	79	553	440
Total (index)	962	1790	752	607	900	101	496	824	1487	2160	569	1307	857
No. of Species	17	28	19	21	23	15	19	17	19	19	17	21	17
Weeks Done	20	18	12	22	19	22	20	25	26	19	25	26	26
Transect Started	1976	1976	1978	2004	2012	2008	2008	2008	2009	2009	2009	1992	1998

Table 1: Norfolk Transect Data as Indices (corrected to 26 weeks)

	Swanton Novers Little Wood	Roydon Common	Sutton Fen	Gaywood Valley	Marlingford	Middle Haring Heath	Ludham Marshes	Barnham Cross Common	Cranwich Camp	Dursingham Village R/way	Syderstone Common	Dursingham Bog	Ringstead Down	Sculthorpe Moor 3
Small Skipper			39			258	45	78	39	5	1	20		37
Essex Skipper									7		5	18		32
Sm/Es Skipper	16	15	1	50	26				111	2	255	25	312	160
Large Skipper	1	8	112	55	8	72	60	50	19	4	8	33	12	5
Dingy Skipper									24					
Swallowtail			93				1							
Clouded Yellow														
Brimstone	33	20	112	12	14	116	6	12	203	1	5		13	
Large White	83	15	26	41	126	111	32	21	3	16	1	10	13	28
Small White	9	10	32	72	139	54	16	27	7	30	79	14	114	123
Green-v. White	34	8	197	50	39	9	75	2	18	27	2	14	22	61
Orange Tip	1		4	19	29	109	4	11	67	6		12	39	48
Green Hairstreak		5	4			4			16		1			
Purple Hairstreak		2									8			
White-letter H/s									12					
Small Copper		87		4	3	26	2	13	14	3	54	18	13	
Silver-studded Blue														
Common Blue		5	2	7	14	111		3	12		24		33	4
Holly Blue		3	3	14		12			42	4	3			
Brown Argus						65					2		2	
Chalkhill Blue														
White Admiral	1		1							2		3		
Red Admiral	24	52	56	56	24	60	27	15	49	57	32	33	37	105
Painted Lady	4	4	11	3		14	16	1		4	4	3	9	
Sm. Tortoiseshell		34	145	186	31	20	128	14	40	21	29	29	37	72
Peacock	21	11	167	12	20	84	51	8	21	16	9	20	30	64
Comma	9	8	25	26	13	37	2	7	100	30	19	19	39	19
S-w. Fritillary	55								6					
Dark G. Fritillary													1	
Speckled Wood	49	4	49	81	53	14	15	10	35	92	19	8	8	115
Wall Brown							35						7	
Grayling														
Gatekeeper	8	205	277	64	42	298	181	8	11	61	329	40	364	45
Meadow Brown	21	129	493	81	132	1421	1237	249	375	19	125	40	414	129
Small Heath					19	250		101	73		220		4	
Ringlet	201	16	546	187	219	390	105	18	224	65	281	135	401	231
Total (index)	495	641	2405	1020	951	3535	2038	648	1528	465	1515	494	1924	1278
No. of Species	17	20	22	19	18	22	19	19	24	20	24	18	22	16
Weeks Done	26	12	26	21	20	24	16	23	15	22	23	14	18	12
Transect Started	1998	2010	2010	2011	2011	2011	2012	2012	2012	2012	2012	2013	2013	2014

Table 1: Norfolk Transect Data as Indices (corrected to 26 weeks)

	How Hill New	Courtyard Farm	Blakeney Friary Hills	Felbrigg Hall	Foxley Wood	Redgrave & Lopham Fen	Natural Surroundings	Reffley Wood	Burgh Doles	Quidenham	Lyndford Water	East Ruston	Orchard House	Bintree Wood
Small Skipper		22	38			6	5		3	5		63		
Essex Skipper	10	2				4	4		2			27		
Sm/Es Skipper	9			4	20	16	12		13	5	55	114		8
Large Skipper					2	2	2		70	1	9	22	4	6
Dingy Skipper											41			
Swallowtail	12								5					
Clouded Yellow		1												
Brimstone	39	2	4	2	10	19	11	16	3	38	30	3	3	29
Large White	11	21	46	106	21	83	47	8	8	38	25	19	20	17
Small White	21	45	39	23	14	64	35		25	150	3	11	9	11
Green-v. White	67	2	4	1	51	18	70	104	339		8	5	2	95
Orange Tip	13	7	11	4	11	21	31	14	20	18	24		6	20
Green Hairstreak		2									3	5		
Purple Hairstreak					1									
White-letter H/s														
Small Copper	1	4	42			5	3		3	7	16	42		1
Silver-studded Blue												346		
Common Blue		32	35			4	4		1	3	53	4	3	
Holly Blue	3	3			3	3	5	4		14		2	11	5
Brown Argus		5					2				2		2	
Chalkhill Blue														
White Admiral	5				13			2						6
Red Admiral	64	16	55	33	14	51	110	31	47	128	40	15	18	88
Painted Lady	1	2	9	63	1	2	2		2	1	4	1	4	3
Sm. Tortoiseshell	33	46	33	42	3	22	8		113	25	37	7	12	9
Peacock	70	10	12	2	42	57	25	54	177	58	20	38	21	53
Comma	59	6		10	13	13	59	75	9	65	5	10	10	112
S-w. Fritillary					95		2							31
Dark G. Fritillary														
Speckled Wood	51	17	8	1	217	71	11	108	71	89	2	46	2	214
Wall Brown		1	2				2		2					
Grayling											16			
Gatekeeper	40	6	11	7	79	28	68		68	23	125	677	10	100
Meadow Brown	30	232	130	61	171	190	126	57	103	191	158	97	28	360
Small Heath						5					165	93		
Ringlet	79	45	4	12	1200	123	70	138	70	102	98	822	6	953
Total (index)	618	529	483	371	1981	807	714	611	1154	961	939	2469	171	2121
No. of Species	20	23	17	15	21	21	23	12	21	19	23	23	18	20
Weeks Done	24	22	11	14	26	23	16	9	22	29	20	28	17	26
Transect Started	2015	2015	2015	2015	2016	2016	2016	2016	2016	2017	2017	2017	2017	2017

Table 2: Winners and Losers for 2017 Compared to 2016

	2017	2016	% change		2017	2016	% change
Silver-washed Fritillary	300	78	285	Small Skipper	677	581	17
Swallowtail	166	50	232	Common Blue	842	740	14
Red Admiral	1697	652	160	Green-veined White	2154	1942	11
White Admiral	51	28	82	Small Copper	474	431	10
Wall Brown	302	184	64	Ringlet	6187	5704	8
Small Tortoiseshell	1644	1064	55	Painted Lady	301	282	7
Comma	778	510	53	Orange Tip	577	560	3
Small Heath	1169	870	34	Holly Blue	167	164	2
Essex Skipper	119	92	29	Purple Hairstreak	35	36	-3
Brimstone	749	606	24	Peacock	1462	1548	-6
Gatekeeper	3393	2747	24	Green Hairstreak	97	111	-13
Meadow Brown	7864	6475	21	Large White	1204	1404	-14
Dark-green Fritillary	85	70	21	Brown Argus	127	179	-29
Small/Essex Skipper	1281	1064	20	Small White	1224	1751	-30
Speckled Wood	1538	1287	20	Clouded Yellow	2	5	-60
Large Skipper	586	501	17	Grayling	237	648	-63

Table 3: Swallowtail Numbers

Site	Started	Swallowtail Numbers							
		2010	2011	2012	2013	2014	2015	2016	2017
Bure Marshes (NE) TG336164	1976	42	50	20	40	37	7	13	51
Strumpshaw Fen (RSPB) TG340065	2008	6	12	4	2	4	8	5	4
Sutton Fen (RSPB) TG370233	2010	78	123	30	76	118	26	24	93
Wheatfen (Ted Ellis Trust) TG326060	2010	2	10	6	14	8	5	31	16
Strumpshaw Fen (RSPB) TG339070	2010	13	18	6	14	8	5	3	16
Ranworth (NWT) TG357149	2010	2		0	3	0	0	0	0
Catfield Fen (BC) TG366214	2010	4		8	17	16	10	8	21
How Hill (Broads Authority) TG370194	2011		22	2	13	10	9	4	13
Burgh Doles (NWT) TG440126	2016							4	5
Ludham Marshes (NE) TG409178	2012			0	0	0	0	0	1

Saturday 29th September 2018

2.00pm-5.30pm

Hethersett Village Hall

Back Lane, Hethersett NR9 3JJ

‘Moth Recording at West Walton from Elgood Onwards’

An illustrated talk by Paul Waring

Paul is a professional entomologist and co-author of the highly acclaimed Field Guide to Moths of Great Britain & Ireland.

‘Recording Norfolk - What we’ve learned so far’

Andy Brazil, County Recorder

A review of current and historic statues of Norfolk’s butterflies

AGM

Photographic Competition

Further details on page 9

Free Parking

Refreshments

From North/Norwich

At the A47/A11 Thicket roundabout take the HETHERSETT exit B1172. After about 2 miles TURN RIGHT on CHURCHFIELDS & follow the road through the estate and on to BACK LANE. The Village Hall is on your right.

From South/Wymondham

At Waitrose supermarket roundabout follow the signs for HETHERSETT on B1172. After 3 to 4 miles look for CHURCHFIELDS on the LEFT. Follow the road through the estate and on to BACK LANE. The Village Hall is on your right.

See website for map

**Please make a note in your diary of on your calendar
NOW!**

Editorial Note

Mike Gasson

I am sure most readers will have noticed the new cover design for the Newsletter. This is the result of a national policy on the part of Butterfly Conservation to encourage all branches to adopt a corporate style in their publications. We have been given new guidelines for this and the cover is a first move in accommodating the requested style changes. One consequence of using a full page portrait photograph on the cover is that we will need high quality images in future that can accept the cover text without compromising the main subject. Hopefully the photographic competition during the AGM (see page 9) will yield some good candidates but if you already have or in future take a photograph that looks like it might fit the bill, please do send it in.



Humble pie time! Eagle eyed “mothers” will probably have spotted the rear cover error in the last Newsletter. The photograph of a Drinker was of course an Oak Eggar. Both moth species were caught and photographed at the Foxley event in 2017 but I managed to pick the wrong image file. Anyway the intended Drinker is here.

BC Conservation Day of Action

Mike Gasson

Norfolk Branch participated in the national BC Conservation Day of Action on Saturday March 10th 2018. The event was organised by our Regional Conservation Officer Sharon Hearle and involved clearing bramble and hawthorn scrub from a steep chalk slope on the Cut-off Channel near to Feltwell. The site has records for Dingy Skipper and Green Hairstreak and the work undertaken will enhance the habitat for both species. The efforts will be sustainable as the site is grazed by cattle at an appropriate time of year.

The event attracted a group of over 20 volunteers and involved the use of both hand tools and powered brush cutters. For the latter we were given a big boost by the involvement of a group from RSPB organised by their Broads Area Manager Ian Robinson. A significant impact was made on the rather wild scrub as can be seen from the photographs opposite. Sharon added a nice touch by bringing a BC birthday cake as the event was part of the 50th Anniversary celebrations. Visits are planned later in the year during the Skipper flight season to see how well the site has settled down.

Figs. 1 & 2: Start of the day with brushcutters at the bottom of the slope and hand tools at the top. Fig. 3: Sharon Hearle’s Anniversary cake. Fig. 4: RSPB group arriving. Fig. 5: Deep in the jungle. Fig. 6: Getting the job done with loppers. Figs. 7 & 8: Getting the job done with brush cutters.

Photos by Neil Saunders (Figs. 1-4) & Mike Gasson (Figs. 5-8)

1



2



3



4



5



6



7



8



Butterfly Report 2017

Andy Brazil

The numbers in parentheses are the comparable figures for 2016, while the initials in square brackets are those of the recorder. Refer to the list of recorders for full names.

We received 20,805 records (18,486) covering 712 tetrads (722) and representing 7,046 site reports (6,328). As usual I have not included the data from the Big Butterfly Count in these totals, as it would prevent results being comparable to previous years. However, I again include the records from the on-line Garden Butterfly Survey (www.gardenbutterflysurvey.org), Migrant Watch (<http://butterfly-conservation.org/612/migrant-watch.html>), and the mobile phone app “iRecord Butterflies”.

In total 91 tetrads were visited for the first time this year, bringing surveyed tetrads to 1,250 (leaving just 179 unsurveyed tetrads remaining for the 2011-2019 period).

Globally it was the 3rd warmest year ever recorded, just beaten by 2015 and 2016, but it was only the 5th warmest year in the UK. February to July were warmer than average, as was October, while August and September were only average, unlike last year. The warmer spring led to earlier emergences than last year in many species.

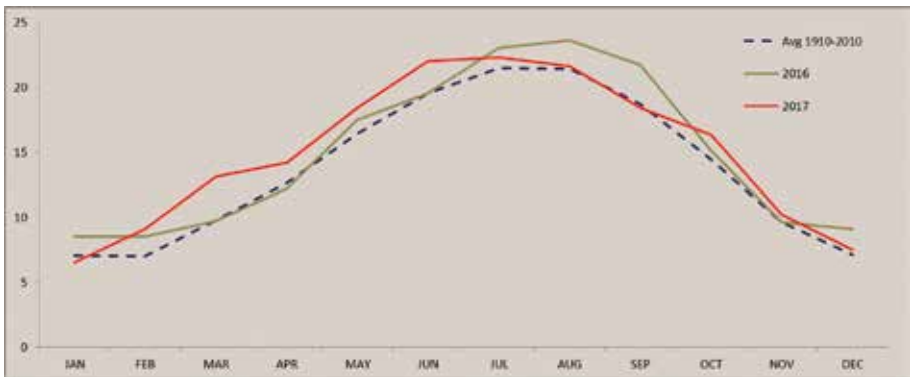


Figure 1: East Anglia Monthly Average Temperatures

April and October were noticeably drier than average, but May to July were wetter. Overall the year came out with exactly average rainfall. The first butterfly was seen on 15 January, the last on 8 December. (4 Jan. – 27 Dec.). Butterflies were seen in every month of the year, with regular sightings from 14 February. In total reports were received for 272 days of the year (258). Nationally it was a poor year for butterflies (although better than 2016), ranking 36th in the series since 1976. It was however, like the curate’s egg, good in parts – the two Admirals, Comma and Fritillaries did well.

Species Reports

Grizzled Skipper (*Pyrgus malvae*)

Recorded from 5 tetrads (5), but representing three sites: Foulden Common and the Cut-off Channel were joined by a sighting of a single individual on a new site on private farmland in TF72. Following from my comments last year, I note that this new site is adjoining a disused railway line, and would suggest this as the best guide as to where to search for undiscovered colonies. Only one reported visit to Leziate, which failed to see any. This remains the rarest butterfly in Norfolk, and the one most at risk of disappearing. Highest count was 6 (16) on the BC field trip to the Cut-off channel on 14 May, seen between 17 April (4 May) and 10 June (6 June). This was an outlier, regular sightings ended 27 May. Nationally it declined by 9%, recording its worst ever year, in Norfolk it seems to have fared even worse.

Dingy Skipper (*Erynnis tages*)

Recorded from 12 tetrads (13), but 1 was new to this recording period, and represents separate reports from two neighbouring sites in TF72, including the one reporting Grizzled. Sightings also came from Narborough, Lynford, Leziate, Cranwich, and West Tofts as well as the Cut-off Channel and Foulden. Earliest sighting 19 April (4 May), last 13 June (10 June). This was an outlier, regular sightings ended 27 May. Highest count 26(20). While nationally it declined by 22%, here in Norfolk it seemed to have a relatively good year.

Large Skipper (*Ochlodes sylvanus*)

First seen on 31 May (29 May), last 28 August (10 September). Recorded from 163 tetrads (132), of which 56 were new.

Small Skipper (*Thymelicus sylvestris*)

Recorded from 168 Tetrads (142), of which 51 were new. First sighting 12 June (23 May) then regular till 14 August, with a single report 27 August (27 Aug.).

Essex Skipper (*Thymelicus lineola*)

Recorded from 97 Tetrads (58), 45 new. First sighting 19 June (17 June), then regular until 7 August, then 13 and 26 August (21 Aug.). All three 'golden' skippers had a terrible 2016 so an increase was to be expected – our increases were slightly better than the national figures but overall long term trends are downwards.

Swallowtail (*Papilio machaon*)

First seen 10 May (20 May), then regularly until 13 July (20 July). Then a handful of reports between 24 July and 20 August (23 August). Recorded from 21 tetrads (23), of which 3 were new – one being an adult photographed in a Attleborough garden on 20th August. This is an example of how far individuals will move in the second brood when potential mates are scarce or non-existent. A much better year than last, with a 57% higher count (that is an astonishing 202% better index value). A low second brood should point to a good first brood next year – time will tell.

Brimstone (*Gonepteryx rhamni*)

First seen 16 February (31 Jan.), but astonishingly continued to be seen from that point. Most years see a few hibernators emerge early, but there were February reports across the county including 12 separate sightings on the 20th. This early start had the effect of blurring the distinction between generations. This is illustrated in Figures 2 and 3 which compare the fairly clear distinction between hibernators emerging and the new brood in 2016 (Figure 2) with the situation in 2017 where no clear demarcation is apparent (Figure 3). This raises the possibility that a long-lived member of the 2016 brood could have bred with an early-emerging 2017 brood, not an event that would happen often. Last was 25 October (25 Dec.). Recorded from 294 tetrads (256), 60 new.

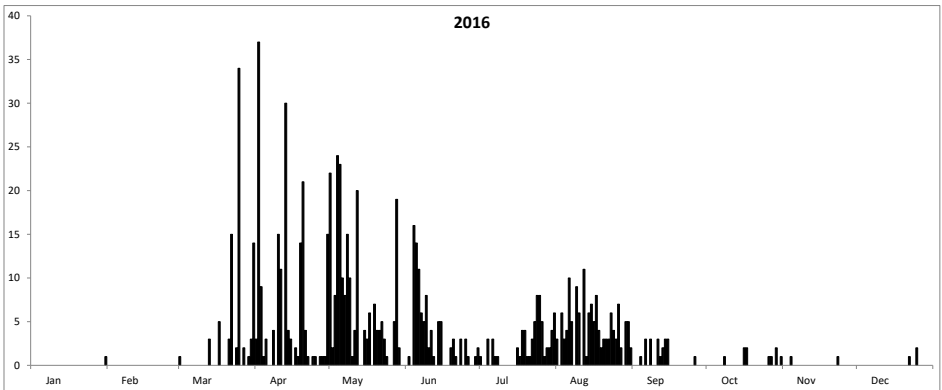


Figure 2: No of reports per day – Brimstone 2016

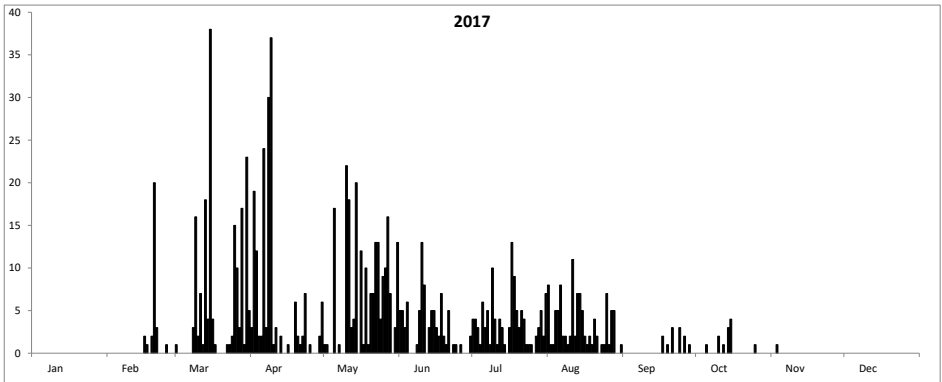


Figure 3: No of reports per day – Brimstone 2017

Large White (*Pieris brassicae*)

It was a poor year. Nationally this was down 19% on last year and there were similar falls on Norfolk transects. There does not seem to have been much immigration – I received relatively few reports of movements “in off the sea” and no large counts were reported – and this may explain the fall. Again emergence was early, first seen on 15 March (2 April), then 19 March and regular from 2 April. That first brood was poor, with consequent effects on the second. Last on 25 October (1 Nov.), recorded from 397 tetrads (374), 108 new.

Small White (*Pieris rapae*)

Again down nationally (16%) and locally. A poor first brood and no migration (although this was never as significant for this species as its larger cousin). The pattern of sightings is uncannily similar for both species, suggesting a similar cause in the decline – perhaps parasites? First seen 15 March (22 March) until 27 October (13 Nov.). Recorded from 376 tetrads (369), 109 new.

Green-veined White (*Pieris napi*)

Whatever the cause of the decline it seems to have skipped this species – a small fall nationally (2%) but actually better local results. Recorded from 295 (298) tetrads, 72 new. The first on 2 April (2 April) then regular until 9 October (6 Oct).

Orangetip (*Anocharis cardamines*)

First reported on 19 March (25 March), it was then regular until 16 June. A single report 9 July suggests perhaps a second brood (2 July). Recorded from 266 tetrads (256), 64 new.

Small Copper (*Lycaena phlaeas*)

Nationally up 28%, but not so much locally. Recorded from 153 tetrads (130), 36 new. First 8 April (10 Feb). The last was 6 Nov (31 Oct.). There were two aberrations reported: ab. *schmidtii* from Pentney (9 Sept) and 2 ab. *extensa* flying together in Catton Park, Norwich (9 July).

Common Blue (*Polyommatus icarus*)

First 9 April was exceptional, next was 20 April (4 May), last 15 October (11 October). Recorded from 186 tetrads (136), 54 were new. Nationally it increased 90% from last year’s dreadful results, but it didn’t fare so well in Norfolk, only recording a 14% increase on transects, while reports increased by 16%.

Holly Blue (*Celastrina argiolus*)

Recorded from 208 tetrads (229) of which 58 were new. First 24 March (31 March). Last seen 16 October (17 Oct.). I felt it was scarcer this year, but transects were essentially unchanged in the county, while nationally it was up 20%.

Chalkhill Blue (*Polyommatus coridon*)

Recorded from 1 tetrad (3) There were no reports from Ringstead Downs or Cranwich this year. First seen 21 June (7 July), last 29 August (1 Sept.). The BC annual count at Warham this year was around 150, a drop from last year’s 247. Nationally however it increased by 17%, making the drop perhaps more significant.

Silver-studded Blue (*Plebejus argus*)

First reported 3 June (19 June), last 18 July (6 August). No report from Cawston this year but the three main colonies at Buxton Heath, East Ruston Common and Kelling Heath were essentially stable, as was the national figure.

Brown Argus (*Aricia agestis*)

First seen 28 April but not then until 11 May (6 May), then regular to 15 June (21 June). Second brood 7 July to 9 Sept (18 July - 21 Sept.), third brood 24 September to 30 October (4 Oct.). Recorded from 56 tetrads (41), of which 22 were new. Nationally up 35%, but transects here fell by 29%. I received roughly the same number of records as last year, but counts were slightly higher. It certainly didn't do well, but local transects may be overstating the decline. Having said that I actually only saw one all year, and last year was also a poor year.

Green Hairstreak (*Callophrys rubi*)

The first sighting was 6 April (20 April) then regular until 3 June (15 June). Then seen 15 June and last 6 July (6 July). Highest count 7 (7). Recorded from 29 tetrads (32), 9 were new. Nationally up 15%, locally down 13% but again probably overstated since few transects have it.

Purple Hairstreak (*Favonius quercus*)

Recorded from 59 Tetrads (50) of which 30 were new. First 19 June but not again until 26 June (6 July), then regular to 13 August, then 20 plus 23 August and last 2 September (7 Sept.). I received 68 records (56), which included my own garden for the first time. Nationally it was up 31%, not reflected locally but it's a difficult insect to monitor. It felt more common than last year.

White-letter Hairstreak (*Satyrrium w-album*)

Recorded from 22 tetrads (14) of which 13 were new. First seen 17 June (6 July) last 5 August (12 Aug.). That was a significant shift in emergence, showing how sensitive this species is to weather. Only 13 people reported seeing adults this year (16) making this one of the hardest butterflies to see in the county. Nationally up 55%.

White Admiral (*Limenitis camilla*)

Recorded from 54 tetrads (39) of which 21 were new. First 13 June (1 July), last 15 September (29 Aug.), but then a second brood sighting 24 October. Up 82% in local transects and 157% in national results, this clearly had a good year, even allowing for the increase from new transects boosting local figures. Plotting the locations of every report ever shows the dramatic increase in range this species has experienced.

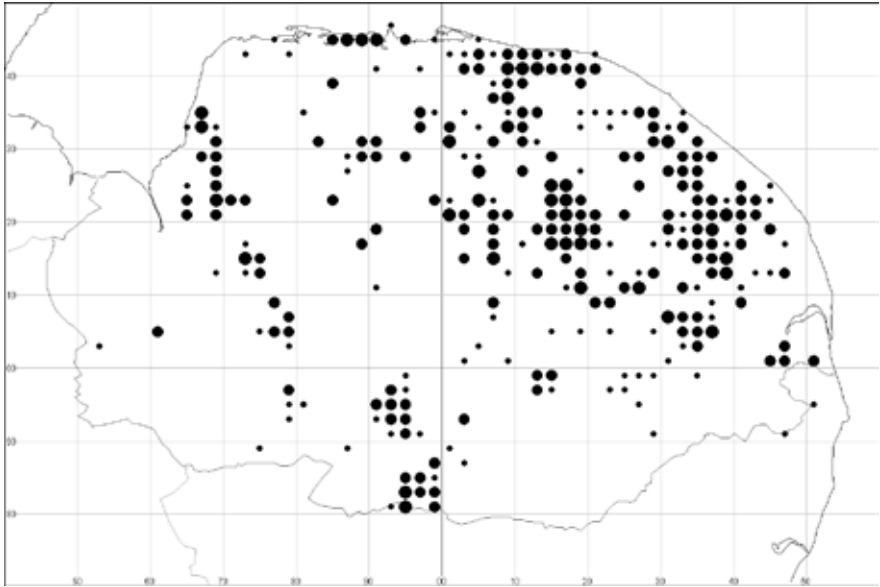


Figure 4: White Admiral - All sightings to 2017

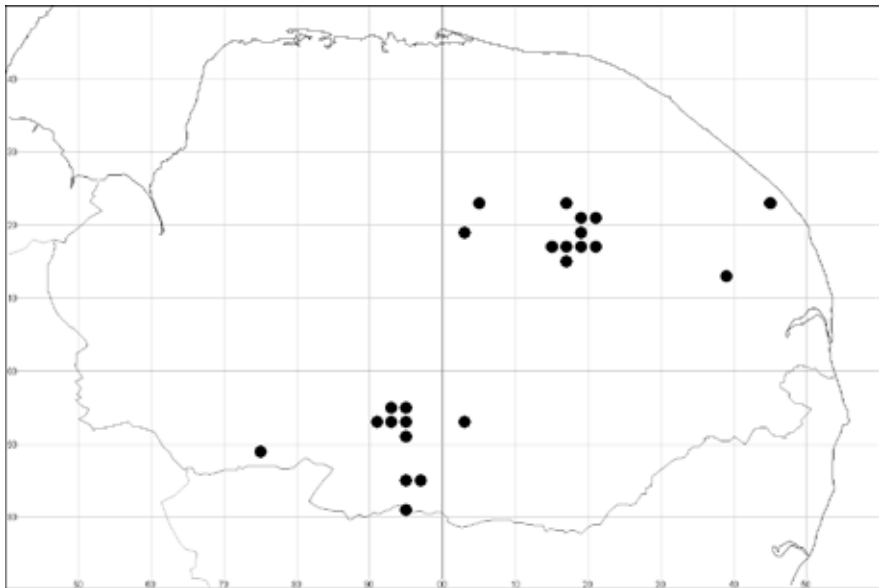


Figure 5: White Admiral known distribution in 1985

Red Admiral (*Vanessa atalanta*)

Nationally this was its 3rd best year, with a 78% increase, while locally it clocked up a 160% increase. Recorded from 464 Tetrads (374), 110 were new. First seen 28 January (5 Jan.), but that and one on 3 February were exceptional. It was not until 16 February that it began to be seen regularly. The last sighting was on 8 December (25 Dec.), regular sightings however continued to 24 November (19 Nov.). The bulk of sightings were May to August, but the highest counts were late September to mid October from coastal sites, which made up nearly all sightings in that period suggesting return migration to the continent. It seems therefore that although there is a resident population, the bulk of summer sightings are either migrants or the offspring of migrants.

Small Tortoiseshell (*Aglais urticae*)

First 15 January (27 Jan.) was an outlier, as was 20 January and 5 February. Sightings were continuous however from 14 February to 4 December (27 Dec.). Recorded from 406 tetrads (328) of which 98 were new. Nationally up overall 18%, but locally much better at 55%. Areas in central England are now experiencing declines which are pushing down national figures.

Peacock (*Aglais io*)

First 20 January (4 Jan.), then 28 January and 2 February. Then from 17 February to 6 November and last 4 December (25 Dec.). Recorded from 390 Tetrads (343) of which 97 were new. There was a sharp decline in sightings in the last two weeks in April which was probably weather-related. This truncation of the over-wintering population probably explains the slight drop in transect counts of 6% (8% nationally), although as with Small Tortoiseshell, central England had significant falls. (The late April drop shows in the Small Tortoiseshell figures as well but being double-brooded it could recover where the Peacock couldn't.)

Painted Lady (*Vanessa cardui*)

The first sighting was a very early 13 March (3 May), associated with strong southerly winds that brought Saharan dust to car windscreens. Then four April records that probably represent individuals blown in earlier and lingering. Sightings were regular from 14 May however, and raised hopes of a bumper year. In the end however counts were only slightly elevated (7%) and nationally they actual fell by 26%. There was very little migration from the second European brood, and sightings were actually fewer in July/August than in May/June suggesting that local breeding was poor as well. Last 6 November (4 Dec.). Recorded from 268 Tetrads (254) – 84 new.

Comma (*Polygonia c-album*)

Nationally this recorded a 91% rise and its 4th best year ever, although locally only up 53%. This is probably because we didn't experience much decline last year, while national figures are in part a result of starting from a lower base. Clearly a good year for them. Reported from 329 tetrads (262), of which 93 new. First 14 Feb (10 March). Hibernators were over by 27 May (17 May), first brood 7 June (24 June) blended into second brood with no clear separation. Sightings continuous until 15 October (9 Oct.) with irregular sightings then until a last 6 November (25 Dec.). Again a sharp fall in the last two weeks of April, but it was out so early it had little or no effect on following generations.

Dark Green Fritillary (*Argynnis aglaja*)

Recorded from 10 tetrads (9) but 1 was new and inland, adjacent to previous records in TF62. Only 3 tetrads reported on the North Norfolk coast, where the winter storms and flooding seem to have badly damaged some populations. Having said that, transects were up 26%, and East Hills had 136 on 16 July and Horsey 146 on 6 July so overall populations were healthy, and where storms have thinned or removed vegetation the regrowth may favour violets (the food plant) which have suffered from the drop in rabbits and consequent growth of taller vegetation. If we can avoid serious storms in the meantime we may have a bumper year in 2020. First seen 14 June (23 June), Last 20 August (24 Aug.).

Silver-washed Fritillary (*Argynnis paphia*)

Recorded from 46 Tetrads (42) of which 22 were new. The species continues to spread, with the first report from TF60 received. Its strongholds remain Holt, Foxley and Swanton Novers, but there must be many woods as yet unrecorded. Nationally it recorded a 141% increase but that is dwarfed by the astonishing 285% growth locally. First seen 15 June (2 July), last seen 23 August (31 Aug.). The earlier (and longer) flight season might explain some of the growth in numbers recorded. Females of the *valezina* form were reported from Swanton Novers, Holt CP and Foxley this year.

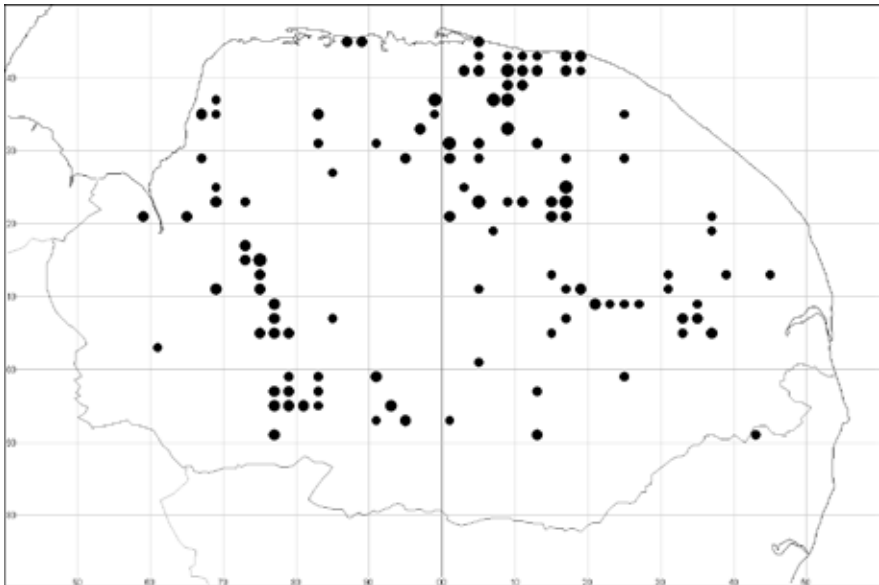


Figure 6: Silver-washed - All sightings this century

Speckled Wood (*Pararge aegeria*)

Recorded from 340 tetrads (285), 75 new. First sighting 29 March (30 March), last 26 October (31 Oct.). Despite a local increase of 20% from last year, and more sightings, when I compare records from 10 years ago I see that we see far fewer early sightings in April/May, and that sightings are clustered around mid-June and late August, while in 2007 they were more evenly spread, with slight peaks early August and late September. This does suggest that there is now a larger difference in over-wintering success between those that pass as pupae and those that pass as larvae, with the former suffering higher mortality.

Wall Brown (*Lasiommata megera*)

Recorded from 72 tetrads (47), 19 new. Significantly reports from TF80 and TL89 are the first this century for each square and represent the largest number of records from the Brecks in any year of the current recording period. A pleasing 64% increase in transects locally, but on the back of big falls in previous years. First seen 5 May (8 May), that brood ended 10 June (17 June). Second brood 17 July (17 July) to 27 August (7 Sept.), then third brood 22 September to 25 October (25 Oct.). All third brood records were coastal.

Grayling (*Hipparchia semele*)

First 18 June, but then not again until 30 June (3 July), last 4 September (24 Sept.). Nationally it fell another 6% to again record its worst year ever, while in Norfolk transect counts fell by 63%. Recorded from 14 tetrads (27), 2 new, but those two in the Brecks, which is hopeful. A very poor year in a very poor decade.

Gatekeeper (*Pyronia tithonus*)

First 14 June (23 May), it was mostly over by mid September with just three sightings to last 25 October (8 Oct.). Recorded from 319 tetrads (290), 95 new. Up 59% nationally, but just 24% locally. It is surprising that it started so late given a warmer first half of the year, perhaps the rain held them back.

Meadow Brown (*Maniola jurtina*)

First 18 May (21 May), but then not until 31 May. Regular until 9 September (11 Sept.) but then a few records until last 25 October (8 Oct.). Recorded from 400 tetrads (384), 95 new.

Ringlet (*Aphantopus hyperantus*)

First 6 June (6 June) Last 1 October (8 Oct.) Recorded from 291 tetrads (315), 68 new. This should have done better than it did really.

Small Heath (*Coenonympha pamphilus*)

First report 15 April was exceptional, but we had 1 May and 5 May as well (6 May), then regular to 5 October (15 Sept.). Recorded from 52 tetrads (53), 8 new. Some good news here, nationally up 65%, locally 34%. It seems that double-brooded 'brown' species did consistently better than single-brooded ones, suggesting that the better spring weather was the deciding factor here.

Incidentals and Migrants

Clouded Yellow (*Colias croceus*)

I received 20 reports (25) covering 20 tetrads (23). The first was 29 May (7 July), last 25 October (4 Oct.). Two reports seemed to suggest local breeding. Another poor year.

Purple Emperor (*Apatura iris*)

We had three sightings in and around Sheringham Park this year, and it does seem likely that we may have a breeding population there. A male in the Park itself on 18 July was followed by a sighting south of the park on 29 July and a female at Beeston on 30 July. There was also a sighting at Bressingham Steam Museum (seen from a train no less) on 26 June and one from Fritton on 10 July – both seem likely to be migrants from the Suffolk populations.

Marbled White (*Melanargia galathea*)

A single report from Stanta was within 20km of the Newmarket colony.

Camberwell Beauty (*Nymphalis antiopa*)

One report on 23 June from TM39, and one from Norwich 1 July. These are unusual as being far earlier than traditional autumn sightings, and further south, but there were three other reports around the same period from other counties.

And that was 2017. Please note my new address for future records (At the front of this issue) It just remains for me to thank all the recorders who submitted data this year. Their records will now go forward to the national database, to be used in research, conservation and the production of the next national and local atlas in 2020. Without their time and effort none of this would be possible.

Records were received from:

R Aldis[RA], D Allan, S Amos, B&Y Anderson, S Anderson[SA], J Andrews, M Arber, A Archer, G Armstrong, J Ashwell, J Attwood, D Austen, T Austin, D Awdry, L Bacon[LB], N Bailey, D Balcombe, S Bamber, H Bannister, T Barker, P Barkham, J Barrett, J Bartlett[JB], V Bartlett, S Barton, S Batt, R Batty, C Beeson, A Bell, J Bennet, R Berry, E Biggs, K Bigland, A Billett, A Bimpson, R Bingham[RB], A Blackburn, J Blofield, T Blumire, D Boothroyd, L Bovey[LBo], S Boyce, C Boyes, V Bray, J Brear, K Brett, R Briscoe, S Brooke, A Brown[AB], D Brown, L Brown, M Brown, R Brunton, A Buchan, R Buck, R Bufton, CJ Bull, J Burdon, R Burrell, S Cain, N Calbrade, A&B Carpenter, B Carrington, P Cartlidge, M Casey, J Castleton, P Cawley, K Chaplin, J Chester, A Chick, A Childs[ACh], N Christina, A Clark, H Clark, S Clark, P Clarke, L Clayden, K&M Claydon, M Clements, J Clifton, A Cobb, S Coggan[SC], R Cole, M Collins, P Conway, D Cooling, J Cousins, R Craig, D Crawford, A Cropper, M Cross, T Crossman, R Culpin, AJ Culshaw[AC], P Curson, E Dack, V Dann, J David, N Davies-Patrick, I Davis, A Dawson, M Day, J Delaney, P Dent, N Di Mino, J Diggle, C&G Donner[CGD], P Donovan, J Dossator, P Douch[PD], G Drown, N Dryden, A Duff, M Dunham, J Dunmore, J Dunn, S Dye, J Edward, J Emerson[JE], K Evans, S Fairhead, E Fairweather, FJL Farrow[FF], R Farrow, J Fay, P Feakes, H Fisher, P Fisher, K Fleming, G Fletcher, B Flowerday, V Flute, M&P Fogden, D Folkes[DF], C Ford, A Franco, B&G Freestone, B Frewin, R&J Frost, T Gallant, C Gambrell, S Garten, M Gasson, K Gay[KG], J George, K George, M

Ghullam, C Gibbs[CG], P&M Gluth[PMG], R Godfrey, R Goldsmith, T Goodfellow, M Goodwin, H Goody, E Goodyear, A Gorton, D Gossage, T Gould, E Goulding, J Graham, C Grass, R Gray, L Green, I Greenhill, M Greenland, N Hagley, P Hampson, M Harcup, L Hardy, K Hargreave, J Harley, R Harley, K Harris, F Harrison[FH], P Harrison, M Harvey, D Hastings, S Hathaway, V Haynes[VH], S Heal, B Hedley, J Helsby, S Henderson, J Henfrey, K Henry, H Hepburn, J&D Hewitt[JDH], B Hicks[BH], R Hoe[RH], E Hoey, J Hogg, M Hoit[MH], M Holmes[Mho], D Holt, R Holt, M Horne, J Horswill, L Howell, D Hudson, C Humphries, S Hunter, J Hurren, J Hurst, M Hurst, K Husband, C Hutchinson, L Ibrom, P Ingham, H Insley, J James, P James, K Jenny, R Jeynes, A Johnson, F Joliffe, B Jones, D Jones, R Jones, I Josland, U Juta, P Kadwell, K Kathy, T Kemp, A Kerr, A Kerridge, I Kershaw[IK], J Kiddell, P Kidman, L Kindleysides, C King, P King, S King, R Kirby, D Knight, B Knights, C Kydd, P Lambley, W Landells[WL], I Langford, P Lavender, L Lawes, P Lawler, C Lawson, V Lea[VL], W Lemmon, S Lenane [SL], J Levien, H Lewis, M Lewis, K Limb[KL], J Lines[JL], M Littlefield, G Long, D Longden, D Longe, L&S Lonsdale, P Lorber, A Lowe, J Lucas, N Lynnette, J Macleod, A Maguire, C Marriage, J Marriott, M Martin, C Mason, E Mather, P Mathews[PM], J Matthews, V Matthews, M Mayes, G McColl, A McGuinness, T Mckie, A McLennan, S McManus[SM], L Mellor, J Metcalf, K Mileham, J Millo, P Missen, A Monteath, V Moore, S Morrison, D Moss, A Mullenger, D Murrell, L Murton, A&C Naden, T Nicholls, D Nobbs, M Noble, S Offord, B Osborne, N Owens, G Oxborough, B Palmer, J Parmenter, B Parrott, J Parry, R Parsonage, D Pashley, D Passmore, S Peache, D Peck, S Pennell[SP], B Perkins, S Philpotts, C Porter, J Powley, T Prater, K Price Moss, I Pritchard, B Puttock, M Pygott, F Ray, D Reynolds, K Rhodes, M Rhodes, P Richards, M Riches, R Richmond, J Riddell, A Riley[AR], D Roberts, S Roberts, D Rogers, M Rooney[MR], B Ross, E Rothney, M Russell, S Ryan, K Sales, A Saunders, J Saunders, D Sawyer, G Schnapka, F Schumann, A Scrivener, B Seager, I Senior, M&M Seppings, C Sharpe, D Sheen, N Shepherd, E Shilland, S Short, D Showler, J Shutes, A Simpson, D Smith[DS], E Smith, H Smith, M Smith, R Smith, DR A Smith, C Spinks, S St John, A Steele, I Stemp, J Steve, C Stevenson, R Stewart, W Stewart, J Stockdale[JS], M Stolworthy, T Stowe, T Strudwick, K Stuart Hill, K Stuart-Clarke, J Stubbington, J Stubley, M Sullivan, E Sutherland, P Tallantire, D Tanya, K Tarsey, D Tatum[DT], K Taylor, P Taylor[PT], A Tegala, R Terry, D Thomas, D Thornton, S Tily, A Tipper[AT], D Tomlinson[DT], C Tracey, M Tristram, N Turner, A Turpin, H Tyrrell, G Upton, A Vickery, T Victor, A Wakeham, N Walker, C Waller, C Ward, K Warner [KH], J Warren[JW], J Wasiak, A Watson, B Webb, M Webster, S Weeks[SW], J Wells, J Wheeler[JWh], I White, R White, F Whitwell, R Whyte, J Wilding, P&D Wileman, P Wilkins, M Williams, T Williams, C Willmoth, L Wilshaw, G Wiseman, S Witham, I Wood, T Wood, M Woodcock, A Woodrow, A Woodward, P Woolnough, K Wright, S Wright, E Wyatt, A Wyldes, E Yacomen, R Yates, D Yeomans[DY], E Yeomans, K Zealand,

Records were also supplied by BugAlert, National Trust[NT], Norfolk Flora Group, Norfolk Wildlife Trust [NWT] and RSPB. They were also taken from internet forum posts and hide log books[i].

First and Last Sightings – 2017

Species	First Sighting	Recorder	2016	Last Sighting	Recorder	2016
Brimstone	16 Feb.	SL	31 Jan.	3 Nov.	KW	25 Dec.
Brown Argus	28 April	NT	6 May	30 Oct.	AB	4 Oct.
Chalk Hill Blue	21 June	BH	7 July	29 Aug.	CG	1 Sept.
Clouded Yellow	29 May	JW	7 July	25 Oct.	AB	4 Oct.
Comma	14 Feb.	AB	10 March	6 Nov.	AB	25 Dec.
Common Blue	9 April	IK	4 May	15 Oct.	AB	11 Oct
Dark Green Fritillary	14 June	PD	23 June	20 Aug.	PT	24 Aug.
Dingy Skipper	19 April	SP	4 May	13 June	SP	10 June
Essex Skipper	19 June	JL	17 June	26 Aug.	AB	21 Aug.
Gatekeeper	14 June	VH	23 May	25 Oct.	MR	8 Oct.
Grayling	18 June	NT	3 July	4 Sept.	LB&VL	24 Sept.
Green Hairstreak	6 April	FH	20 April	6 July	SP	6 July.
Green-veined White	9 March	DY	2 April	9 Oct.	AC	6 Oct.
Grizzled Skipper	17 April	CGD	4 May	10 June	RH	6 June
Holly Blue	24 March	SP	31 March	16 Oct.	MH	17 Oct.
Large Skipper	31 May	AB, JE	29 May	28 Aug.	AB	14 Sept.
Large White	15 Mar.	JB	2 April	3 Nov.	JS	1 Nov.
Meadow Brown	18 May	PM	21 May	25 Oct.	MR	8 Oct.
Orange-tip	19 March	RB	25 March	9 July	AR	6 Sept.
Painted Lady	13 March	DS	3 May	6 Nov.	i	4 Dec.
Peacock	20 Jan.	NWT	4 Jan.	4 Dec.	PMG	25 Dec.
Purple Hairstreak	19 June	Mho	6 July	2 Sept.	KG	7 Sept.
Red Admiral	28 Jan.	KW	5 Jan.	8 Dec.	SW	25 Dec.
Ringlet	6 June	SA	6 June	1 Sept.	WL	8 Oct.
Silver-studded Blue	3 June	KL	19 June	18 July.	AR, SA	6 Aug.
Silver-washed Fritillary	15 June	SP, KG	2 July	23 Aug.	PT, JWh	31 Aug.
Small Copper	8 April.	AB	10 Feb	6 Nov	Many	31 Oct.
Small Heath	15 April	CGD	6 May	5 Oct.	DF	15 Sept.
Small Skipper	12 June	AB	23 May	15 Oct.	DF	8 Oct.
Small Tortoiseshell	15 Jan.	SM	27 Jan.	4 Dec.	AC	27 Dec.
Small White	2 March	ACh	22 March	27 Oct.	LBo	13 Nov.
Speckled Wood	29 March	DT	30 March	26 Oct.	AT	31 Oct.
Swallowtail	10 May	JDH	20 May	20 Aug.	SC	23 Aug.
Wall	5 May	BH	8 May	25 Oct.	DT	25 Oct.
White Admiral	13 June	AB	1 July	24 Oct.	RA	29 Aug.
White-letter Hairstreak	17 June	Mho	6 July	5 Aug.	FF	12 Aug.

Wider Countryside Butterfly Survey 2017

Alan Dawson (WCBS Co-ordinator)

The Wider Countryside Butterfly Survey is now an extremely well-established scheme and is recognised as a very important source of data by a variety of wildlife organisations and government bodies. Happily we know that funding for the scheme will continue for at least several years to come. As in previous years, recorders in Norfolk have done a splendid job in recording and also in dealing with the new online recording system, for which I am very grateful. As last year, I must also thank Andy Brazil for his skills in converting the mass of data that comes from BC headquarters into a usable form.

The data is presented in the same way as for previous years. Table 1 shows the total numbers counted for each of the four months of the survey: May, June, July, August, for all the WCBS squares recorded in Norfolk, both by Norfolk BC volunteers and by the volunteers from the BTO. The total counted, 8338, was higher than 2016 and 2015 and it was good to see Clouded Yellow and Grayling appearing again, having been absent from last year's records. I have included the month by month totals for 2016 at the bottom of the table, because it highlights a big difference in flight times between 2017 and 2016. The June totals for last year are very much bigger than for 2016, and the August totals substantially smaller. It seems as if species such as Meadow Brown and Ringlet (which of course make a big contribution to the numbers) flew much earlier, contributing to the June figures, and had largely disappeared from the scene by early August.

Table 2 shows the occupancy and abundance of the butterflies recorded in July and August by the BC volunteers. In contrast to my predictions in the last newsletter, Meadow Brown did manage to cling on to the number one spot, although run very close by Gatekeeper and Ringlet. The numbers of both Meadow Brown and Ringlet were low in historical terms, but this may be due to the timing of visits and the early flight times, so that Meadow Browns were over by the time many of the August visits were done. Spectacular winners for 2017 were Red Admiral and the Small/Essex Skippers with Small Tortoiseshell also having a reasonable year. There were no other major changes, although it was good to see Small Copper coming back from a dreadful count in 2016. Although a better season than 2016, with a welcome increase in the number of species seen and in the number of butterflies counted per visit (Table 3), the latter is still low looking back over past years.

As ever, my thanks go to all the recorders both from BC and BTO for all their hard work generating these valuable records. I hope, like me, you really enjoy visiting your square and are looking forward to the 2018 season and wondering what it will bring. Christian King is taking over from me as the Norfolk organiser for WCBS and I wish him well in his new role.

Table 1: Totals for Four Months

	May	June	July	August	Total
Small Skipper	0	13	184	9	206
Essex Skipper	0	1	106	0	107
Small/Essex Skipper	0	19	114	2	135
Large Skipper	0	27	45	2	74
Clouded Yellow	0	2	0	0	2
Brimstone	8	0	9	10	27
Large White	10	17	452	246	725
Small White	16	17	433	323	789
Green-veined White	25	2	168	138	333
Orange Tip	33	2	0	0	35
Green Hairstreak	0	0	0	0	0
Purple Hairstreak	0	0	8	0	8
White-letter Hairstreak	0	0	0	0	0
Small Copper	2	0	9	13	24
Common Blue	9	7	6	32	54
Holly Blue	3	0	6	8	17
Brown Argus	0	0	2	2	4
White Admiral	0	0	5	0	5
Red Admiral	16	24	205	61	306
Painted Lady	2	3	15	9	29
Small Tortoiseshell	4	246	176	181	607
Peacock	24	6	53	62	145
Comma	0	7	113	9	129
Silver-washed Fritillary	0	0	4	0	4
Dark-green Fritillary	0	0	1	0	1
Speckled Wood	8	20	35	165	228
Wall	1	1	3	9	14
Grayling	0	0	6	1	7
Gatekeeper	0	18	1008	161	1187
Meadow Brown	0	515	1027	123	1665
Small Heath	0	0	22	4	26
Ringlet	0	0	1169	1	1445
Total 2017	161	1222	5384	1571	8338
Total 2016	174	221	5074	2234	7703

Table 2: Occupancy & Abundance Data for July & August 2012-2017

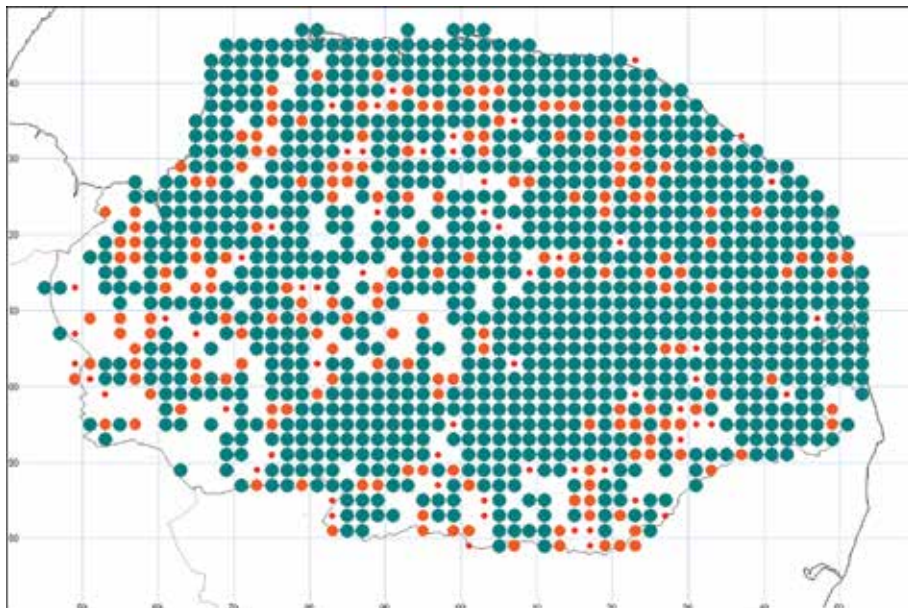
	Occupancy (%)						Abundance (%)					
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017
Small Skipper	24	36	54	65	44	45	35	116	136	197 (6)	141 (8)	163 (10)
Essex Skipper	14	24	23	35	16	26	9	38	153	80 (10)	53	20
Small/Essex Skipper	41	55	89	42	28	84	94	161 (9)	209 (9)	58	60	289 (6)
Large Skipper	51	64	54	39	34	29	50 (9)	122	131	70	30	39
Clouded Yellow		12	3	3				8	1	1		
Brimstone	3	21	11	13	9	26	1	7	5	9	14	19
Large White	83	88	89	94	89	90	187 (4)	978 (4)	301 (5)	476 (5)	635 (4)	557 (4)
Small White	86	100	91	97	94	100	149 (5)	1316 (3)	415 (4)	641 (4)	652 (3)	554 (5)
Green-veined White	58	76	69	68	75	68	134 (6)	334 (8)	292 (7)	137 (7)	280 (6)	251 (8)
Orange Tip												
Green Hairstreak				3						2		
Purple Hairstreak		9	9		3	6		7	5		2	2
White-letter Hairstreak	3						1					
Small Copper	21	39	20	16	9	32	10	25	20	11	3	20
Common Blue	10	55	37	39	19	45	5	147 (10)	81	56	17	30
Holly Blue	17	12	11	23	34	26	8	9	4	18	26	13
Brown Argus		6	11	3	0	3		8	16	1		2
White Admiral	7	9	6	10	3	6	5	4	3	10	1	5
Red Admiral	55	33	80	42	72	84	61 (7)	18	93	34	66	190 (9)

	Occupancy (%)							Abundance (%)						
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017		
Painted Lady	3	21	20	45	28	35	1	18	9	24	18	18		
Small Tortoiseshell	21	100	91	58	78	90	32	565 (6)	536 (3)	133 (8)	208 (7)	273 (7)		
Peacock	45	91	66	68	47	81	49 (10)	432 (7)	178 (10)	83 (9)	101 (10)	88		
Comma	62	55	57	32	47	58	54 (8)	45	62	31	46	102		
Silver-washed Fritillary		3				3		1		0	2	3		
Dark-green Fritillary					3	3					1	1		
Speckled Wood	69	61	63	48	47	71	49 (10)	100	231 (8)	44	112 (9)	159		
Wall	10	18	17	13	3	26	9	17	55	19	1	11		
Grayling			3			3			2			7		
Gatekeeper	100	91	91	97	91	90	442 (3)	750 (5)	839 (2)	822 (3)	629 (5)	835 (2)		
Meadow Brown	100	100	94	97	97	94	939 (1)	2135 (1)	1724 (1)	1255 (1)	1080 (1)	847 (1)		
Small Heath	14	12	9	13	13	6	16	19	15	16	40	26		
Ringlet	86	88	86	81	88	68	664 (2)	1519 (2)	293 (6)	826 (2)	1018 (2)	772 (3)		
				Total			3004	8899	5818	5054	5236	5296		

Table 3: Summary of Data for July and August

	2012	2013	2014	2015	2016	2017
Total Species	23	27	27	26	26	28
Number of Squares	29	33	35	31	32	31
Number of Visits	54	63	65	55	67	62
Average Count per Visit	56	141	90	92	78	83

Chairman’s Thoughts by Judy Dunmore	4
Field Trips and Events 2018	5
Moths Matter by Greg Bond	8
Photographic Competition 2018	9
Norfolk UKBMS Transect Recording in 2017 by Alan Dawson	10
AGM Details	17
Editorial Note by Mike Gasson	18
BC Conservation Day of Action by Mike Gasson	18
Butterfly Report 2017 by Andy Brazil	20
First and Last Sightings 2017	20
Wider Countryside Butterfly Survey 2017 by Alan Dawson	32



The map shows coverage to date: small red (only 1 species recorded); orange (less than 5 species recorded); green (5 or more species recorded); white areas are unrecorded. Can you help fill in the blanks? Are there any gaps close to you? Can you spare an hour to pop over and write down the butterflies you see one day this summer? Every square you can fill in will help us complete a full view of the state of Norfolk’s butterflies. (Of course we still want your records even if you live in a filled square. Many of the squares we do have records for are still missing common species, so we still want your records wherever you are.)

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)

VAT No GB 991 2771 89