



**Butterfly
Conservation**

Saving butterflies, moths and their habitats

The **Suffolk** *Argus*

*The Newsletter of the **Suffolk** Branch of Butterfly Conservation*

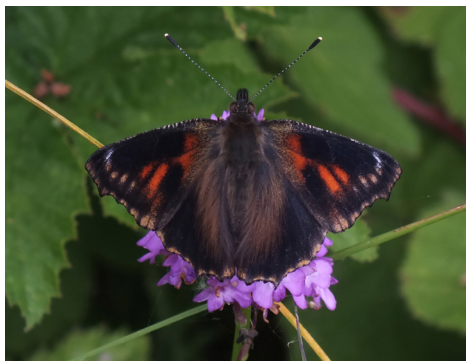
Silver-studded Blue male on Bell Heather photo Matt Berry



Autumn 2014

Volume 61

An aberrant butterfly photographed by David Mills at Walpole (see page 3)



**Meeting the public
and new members
at the Flatford
event
July 2014**

photos Bill Stone



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The Species is.....

Gary Last sent in the photos (opposite page) which were taken at Walpole by David Mills on the 26th June 2014. The butterfly is an extraordinary aberrant. The species, let alone the aberrations might be troublesome to identify! What do you think?

Rob Parker gave his answer, "Take a look at the underside shot, and note the pallid area typical of a normal Small Tortoiseshell. Take a look at the shape of the margin; only a small difference [compared to Red Admiral] on the forewing, but note the short tails on the hindwing - where ST has tails, but RA does not.

I took a look at Alec Harmer's 'Variation in British Butterflies' and found a close match with a Small Tortoiseshell taken in the New Forest in 1965 (not a photo, but a copy of one of Russwurm's paintings). Its undersides look similar to David Mills' specimen and the forewing features a similar pattern of orange markings, but there is a lot more white at the apex compared to David's. It is titled ab. *semiichnusoides* Pronin, and for my money,

David's Walpole specimen fits that form pretty well.

I will do a bit more research, and will probably forward the images to Alec Harmer, whom I know, for his experienced opinion."

Alec Harmer replied, "Forewings are ab. *osborni* Donckier, whilst the hind wings are ab. *nigrita* Fickert.

Rob added, "I expect that you know that in entomological nomenclature the name of the person who first presented the scientific description of the new species (or aberration) is added after the scientific name - genus, species, subspecies, aberration. So Donckier & Fickert are people. They probably never met - or ever saw a specimen like yours to link their names."

Small Tortoiseshell *Aglais urticae*,
forewings ab. *osborni* Donckier,
hindwings ab. *nigrita* Fickert

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New Members

Susan Sidle, Branch Membership Secretary

We warmly welcome the following new members to Suffolk Branch, who have joined us since the beginning of June this summer. A special welcome is made to the four family members included below. We now have 21 “pioneering” family memberships (up from three in September 2010).

Miss E Ames, Minsmere Nature Reserve	Mrs P & Mr A Lenoir, Weeting
Mr M D Andrews, Bury St. Edmunds	Mrs A Leonard, Ipswich
Mr P Barker, Westhorpe	Mrs R Lincoln, Great Glemham
Mr P Bird & Miss S Jinks, Bury St. Edmunds	Mrs J Macready, Bury St. Edmunds
Mr G Blake, Newmarket	Mr A Moss, Ipswich
Mr J Boardman, Leiston	Miss M Nadin & Mr B Calver, Worlingham
Miss G M Casetta, Ipswich	Mr P L & Mrs R S Newlands, Hesselton
Mr A Cresswell & Miss A Harrington, Shotley	Mr K G Nicolaou, Beccles
Mr B & Mrs M Critchlow, Trimley St. Mary	Mrs A & Mr S Pena & Family, Bury St. Edmunds
Mrs J Dahlman, Lakenheath	Mr D & Mrs L Pitt , Worlingham
Mrs C Debnam, Potters Bar	Dr L Richardson, Bungay
Mr M & Mrs S Dennis, Debenham	Mr P & Mrs S Scheller, Aldeby
Ms C Dolso, Lawford	Miss L Scott & Mr D Nelson, Cowlinge
Miss K & Miss C Draycott, Gisleham	Ms P Seaward, Stowmarket
Mr J N Dunn, Ipswich	Mrs N Sheldrake & Mrs M Wilkinson, Newmarket
Mr M & Mrs S Fahie-Wilson & Family, Shimpling	Miss S Sindall, Wissett
Master J Finch, Beccles	Dr D L Taylor, Great Waldingfield
Mr M G Gates, Geldeston	Mr N Tebbs, Ipswich
Mr M & Mr P Gavin , Felixstowe	Mrs G Tilley, Bury St. Edmunds
Dr PP Hayes, Felixstowe	Mrs K & Mr P Ward, Stoke Ash
Miss K Howlett, Rushmere St. Andrew	Mrs S & Mr B Ward, Great Barton
Mr K & Mrs R Jackson & Family, Stowmarket	Ms S Watson, Saxmundham
Mr C J & Mrs L M Jakes, Bury St. Edmunds	Miss Z Wildon, Kesgrave
Miss C Jeffreys, Needham Market	Miss C Williams & Miss G Spink, Ipswich
Dr B T Keiller, Norwich	Mrs B & Mrs W Wood & Family, Rushmere St. Andrew
Mr D T W King, Bury St. Edmunds	Mrs J Worton, Corton

In addition to the Welcome Pack from Butterfly Conservation, all new members should receive a Welcome Letter from the Branch either by email (if we have your email address) or by post. If you don't think you have received a Branch Welcome Letter do let me know (see my contact details below).

If we welcomed you by email, you will have received a link to our online newsletter. By default you will continue to receive a link to future online editions **unless you request otherwise**. Many of our members prefer to receive a hard copy of the branch newsletter and we are very happy to oblige. If you would prefer a hard copy of future newsletters, or, if you currently receive a hard copy but would like to receive a link to the online version, please let me know.

At this year's AGM I was able to report that at the end of September 2014, Suffolk Branch had a total of 455 household memberships (taking into account the different membership types this equates to 626 individual members). This means that over the last four years the Suffolk Branch membership has almost doubled, up by 92% from 237 household members in September 2010. This is a spectacular rise and hopefully reflects an increasing awareness of the pressures facing our moths and butterflies.

In the year to September 2014, 88 new household members joined Suffolk Branch (cw 67 in the previous year), another impressive statistic. Many of you joined after taking part in last year's Big Butterfly Count. Our programme of events is constantly evolving in response to our changing membership. So please do stay with us and find out how you can get involved next year.

That just leaves me say a very big **THANK YOU** to all of you, our members, for your valuable and continued support.

Contact Sue Sidle: susansidle361@gmail.com or 01379 643665.

Editorial copy date

Contributions for the Spring edition of our newsletter are very welcome and should be sent to the Editor, Peter Maddison, no later than **Sunday 18th January, 2015**.

Any piece of writing considered to be of interest will be published and we also welcome line drawings, prints and photographs.

Contributions (preferably electronic) can be sent to the address on the Contacts page or by email to: prmaddison@yahoo.co.uk

Want to get involved a little bit?

Michael Dean, Chair of Suffolk Branch of Butterfly Conservation

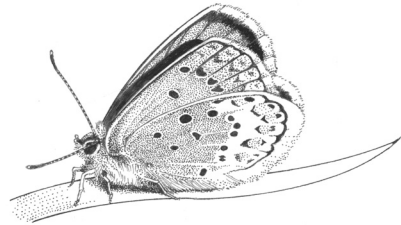
Maybe you are a long-standing member of our Suffolk Branch? Maybe you have only just become a member and you are reading your very first *Argus* (and enjoying it I hope!)? Wherever you sit in that cline of membership there are many ways that you can extract maximum benefit and indeed enjoyment from your membership. Perhaps now is the time to give things a whirl.

What exactly am I going on about I hear you ask? Well there are many opportunities to get involved in your local Branch on both an active or rather more passive basis and *any* offer of help is really important in helping to conserve and study our Suffolk butterfly (and moth, naturally) heritage. Here are just a few ideas, in no particular order, to excite your anticipation perhaps.

- Dust off the cobwebs and get involved with an active work party this winter; there is plenty to do in and around Ipswich in particular and it's a fantastic way to slim down & keep fit.
- Come up with some ideas for events and activities for our membership; we are specifically looking for a volunteer to work with the committee in pulling together the Event Programme for 2015.
- Get involved with and assist with the running of some of our events - even just one to start with.
- Submit a butterfly / moth related article to the *Argus* on any topic, including things like

butterfly friendly gardening; we run novice recorder sessions every year.

- Start to become involved with recording of butterflies and / or moths - an ideal starting place is a deck chair in your garden with a notepad in one hand and a cool drink in the other! More exciting is to join in on a moth trapping expeditionafter dark.
- Join our local committee and shadow what goes on to find out how it all works and how you might get involved in some way.
- Get involved with your local school to help enthuse the next generation of lepidopterists.
- Even if you feel that you just want to find out a little more, with absolutely no pressure, please drop me an Email or telephone any-time and we can take it from there.
- Thank you very much in anticipation.



Purdis Heath SSSI Silver-Studded Blue update

Julian Dowding

The following is just a little information about winter work going on at Purdis to improve habitat for the threatened Silver-studded Blue butterflies and the ants upon which they depend. It will consist of:

Scrub control - the removal of gorse, birch, bramble and some oak shading out the butterfly's food plant.

Scraping - to get rid of the deep litter layer and excess nutrients, followed by strewing with heather litter containing seeds, to create new pioneer habitat and bare sandy areas. Use of JCB.

Forage harvesting - the cutting of strips and circles of tall mature ling and some bell heather, to enable the heather to regenerate with new growth. This also creates a diversity of structure within the heathland which will help the butterfly. Achieved with tractor and Rytec cutter.

Treatment of scrub re-growth - achieved by either mechanical means (cutting or digging by hand) or using a herbicide. Scrub will try to re-grow for many years after cutting or pulling. Controlling this re-growth is a constant battle but one which needs to continue if the heathland is to remain open and suitable for Silver-studded Blues. Scrub re-growth will be a priority next spring.

To these ends, volunteers will carry out some of this work. These work parties take place on the first Saturday of each month throughout the winter and occasionally on

weekdays. Generally work is carried out with basic tools such as bow saws, spades and loppers, so it is something that most people can do. It can also be a pleasant experience to get out on the heath in winter and be part of a group of people committed to saving this precious butterfly. Furthermore, it's also a good way to burn off a few calories. If you would like to be involved in the work or fancy coming to Purdis to find out what's happening, please contact Helen Saunders or myself. Our details can be found on the Argus *Contacts* page and on the Branch website

<http://www.suffolkbutterflies.org.uk>

Purdis Heath Work Parties are held on the 1st Saturday of the month. Starting at 10.00am and usually finish by 3.00pm, though people can come and go as they wish. Tools, tea, biscuits (and lovely workmates) are provided. Bring gloves if you have them and your lunch if staying all day.

For further details contact Helen Saunders: helens919@gmail.com .

It is useful to know how many volunteers there are likely to be, so if you're planning to come along please email Helen beforehand, if possible.

Work party dates have been arranged for Saturday 1st Nov, 6th Dec, 3rd Jan and 7th Feb

Small Heath at Martlesham

At the end of August Bill Stone, County Recorder, received a letter from Richard Staines regarding his concerns over the decline of the Small Heath at Martlesham Heath.

Richard writes:

“Dear Bill: I’ve been looking at my earlier records of butterfly observations this morning which go back to the year I began - 2001. I am concerned over the apparent demise of the Small Heath, *Coenonympha pamphilus*, wholly absent in the most recent records. When I started observing on the ‘western corridor’, that remaining strip of Suffolk Sandlings between Dobbs Lane and Eagle Way and that contains the old airfield runway, Small Heath was quite populous and frequently encountered during June through to September. Here are the figures - they’re quite telling:

2001, 2002, 2003: frequently encountered and certainly much in evidence.

On 3rd Sept 2003 I saw 16. Figures were good right up to the end of September.

2004: Again good, seeing 12 on one day and 15 on 5th Sept.

2005: 10 seen on one day, again much in evidence, June-September.

2006: present but in moderate numbers, only singly or in pairs, no more than 6 seen on one day.

2007: around 6 or 7 for the whole season.

2008: around 5 for the whole season.

2009: 10

2010: Zero

2011: Zero

2012: Zero

2013: 3

2014: so far (up to 25th Aug) Zero

Coenonympha pamphilus liked the short grass of the western corridor, thin and uncultivated, and in my early, more inexperienced days I tended to confuse it with Meadow Brown - a smaller version - but it didn’t take me long to distinguish the two. It lives in colonies, in leks, and prefers dry, well-drained environments with short, sparse sward, just the conditions which the heathland on Martlesham Heath provided, and still does. Adults could be seen in the early part of the last decade virtually continuously from June through to September. But I read of losses occurring in this species and population decreases on monitored sites in England and Wales, yet with no explanation given for the decline. I read also of slight increases in parts of central Europe and Russia. Why there are losses in places which have remained suitable remains unclear. Could it be a consequence of altered weather patterns? I’m concerned by this trend. Looking at my records today alerted me to it. If it isn’t officially categorised as an endangered species, perhaps Small Heath should be.”

Bill’s response:

“Richard: Many thanks for this email and your observations regarding the Small Heath. I share the same concerns as you regarding this butterfly in Suffolk (and elsewhere) and as such it is a species that I am looking to monitor closely in my recorder role. This butterfly is a BAP priority species and is, therefore, subject to close monitoring through a number of surveys such as the UK Butterfly Monitoring Scheme (UKBMS). Of interest, the last “State of the UK’s Butterflies Report” in 2011 gave the 10 year distribution trend as declining by 9% and the

10 year population trend as declining by 28%.

Although I have only received some of the records for the 2014 year it does seem that *C. pamphilus* has enjoyed a good year in some areas (mainly heathland, particularly the Brecks) and a poor year in others particularly in woodland areas. It will be interesting to analyse the records once they are all in to see how numbers compare with last year. In 2013 records for this butterfly species were slightly down on 2012 but over a number of years there does appear to be an ongoing decline in the county although it is not as dramatic as with other species.

As to the reasons for the demise then this is something that is being closely looked at.

So far, indications are that it is a butterfly that cannot tolerate the intensification of farming methods and it struggles to re-colonise areas that were once strongholds. In woodlands, it also seems to be a victim of un-managed woods or because of poor or unsympathetic maintenance programs. Again, once it appears to struggle it does not seem to be resilient enough to bounce back.

Bill's comment: Richard's observations are thought provoking and also reflect his efforts and dedication in monitoring a site closely and on a long term basis. I hope it will make others in the Branch think about areas local to them and also encourage them to start to record in detail.

Clouded Yellows on the Suffolk Coast

Richard Stewart

Thanks to information supplied by Bill Stone, Marie and I headed for East Lane, Bawdsey on 24th July to look for Clouded Yellows. We also searched for the Wall but without success, though we had a total of fourteen species. We started from the car park by using the higher path, closer to the sea and with a welcome breeze to keep us cool. We walked as far as the second Martello tower, recording eight Clouded Yellows. Normally I wouldn't bother to count on the way back but this time we took the lower path all the way and this gave us a more sheltered and sunlit area to study. All the twenty we recorded were along about four hundred yards of the path, roughly

from the steps joining the two paths back to the car park. A few were observed landing on plants but none were actually nectaring, most just landing on the ground. We did search the rough ground on the other side of the car park, and the nearby lane leading back to the road, but no more were found.

Seeing so many of these relatively rare migrants was a memorable experience, especially observing them through our close focus binoculars. My records indicate a total of 'about twenty one' at the famous Magdalen Hill reserve, near Winchester, in September 2000, but this is easily our highest Suffolk total.

The Arrival of *gorganus*

Richard Stewart

Some readers may be aware of the reported arrival of *gorganus*, the continental variation of the Swallowtail, in our country. It was featured on the last Springwatch and in a recent edition of the BBC Wildlife magazine.

The best source for historical information about our British species is 'The Butterflies of Great Britain and Ireland', volume 7:1, by Maitland Emmet and Heath. This gives nineteenth century records of *gorganus*, mainly in Kent, and a few at later dates, but warns that most were probably escapes or releases. *gorganus* does have a more catholic choice of larval food plants, compared to our resident *britannicus*, but I have my doubts about the authenticity of these sightings. The BBC Wildlife magazine states that they had 'hatched in the wild and flew across the Channel in fine weather'. I wonder if this was actually witnessed. My reason for doubt is that some years ago there was a release of *gorganus*, which from subsequent sightings, was tracked down to somewhere on the Rivers estate in Ipswich, Alan and Beryl Johnson, living nearby, had one in

their garden and another was seen in the middle of Ipswich, by an office worker looking out of the window.

I was subsequently contacted by several people who then had swallowtail caterpillars in their garden. The one I examined and photographed just a few hundred yards from my home along Westerfield Road was actually feeding on garden fennel, proof that it was *gorganus*.

The Swallowtail is one of just six British species fully protected by law but regrettably this doesn't apply to other British species and consequently breeders and releasers are not technically breaking the law, unless they release species on nature reserves or introduce ones not usually resident in our country. Such ill-informed releases can upset the delicate balance of an existing habitat, are unlikely to succeed in the long term and make life very difficult for hard working County Recorders.

Sign up for the free e-newsletter

'All Aflutter' is Butterfly Conservation's free newsletter delivered to your inbox once a month. It provides monthly information on which species to look out for, the latest butterfly and moth news, gardening tips and special offers.

Sign up for the newsletter at:
<http://butterfly-conservation.org/2061/email-newsletter.html>

The Purple Emperor in Suffolk 2013, Suffolk Argus, Summer 2014

Editor's note

Some readers have been puzzled by the red skull & crossbones symbols on Images 3.1 and 3.2 of the report. We apologise for their absence

from the Key. They indicate the two introduced colonies at Theberton Woods (Suffolk) and Marks Hall Wood (Essex).

Letters to the Editor

Dear Editor,

I am rather surprised to read the language used in the Summer 2014 edition of *Suffolk Argus*, relating to the colony of Purple Emperors in Theberton Woods. It was stated that the reintroduction of these butterflies into the wild was “unauthorised” and that the authors of the paper on the Purple Emperor survey in Suffolk were “acutely disdainful of the existence of introduced colonies”. There was no elaboration of either of these comments and it could be inferred from them that the reintroductions in Theberton Woods are universally disapproved of. I cannot agree.

Firstly, although we may argue that Lepidoptera are poorly represented on the list of protected species, Purple Emperors are not on that list. Thus the keeping and breeding of these butterflies is not illegal. Secondly, by whose authority should the release of these species be “authorised”? There is no legal requirement for authorisation. I appreciate that a project plan identifying the source of the species to be introduced and how the habitat is to be selected and managed would be ideal, but we do not live in an ideal world. Theberton has been managed for the benefit of biodiversity and the Purple Emperors are part of that diversity. However, Silver-washed Fritillary and White Admiral are also present at the site and there is no evidence that these have

ever been seeded from captive stock. Finally it is known that the feedstock of Purple Emperors were carefully chosen and are from a well-known UK site. Any suggestion that they came from abroad is conjecture and not borne out by evidence. I also note that the report on Purple Emperors in Suffolk notes the role of Simon Leatherdale (retired) in the protection of woodland sallows. I think that Simon would acknowledge that the sallows in Theberton Woods were marked for removal and if it weren't for the intervention of the people who released the Purple Emperors and their determination to convince him of its benefits, the sallows would have been lost.

At a time when we are fighting for better control of those who persecute birds and animals by poisoning, shoot migrant birds on passage across the Mediterranean, lime branches to capture passerines, undertake hare coursing and badger baiting, criticising those people who are maintaining habitat to support the native species that they release seems like firing at the wrong target and smacks of a “not invented here” attitude to conservation. We should applaud the skill of these entomologists who retain the ability to breed these butterflies, not condemn them.

Pete Rowberry
Saxmundham

Rob Parker Responds

To: The Editor, Suffolk Argus

Peter Rowberry writes about the joys of having the Purple Emperor flying in Suffolk, and picks up the wording I used in the preamble to the report on the 2013 Purple Emperor survey (Suffolk Argus, Summer 2014, p.15). I drew attention to the alternative viewpoint, that the release of insects can be deleterious, and should be done only under carefully controlled conditions. In the present case of the Purple Emperor, this is relevant because the existence of an introduced population clashes with one object of the survey - to demonstrate that discrete populations can exist in the wild at low density in East Anglia without our knowledge.

A great deal of effort goes into recording butterflies and publishing distribution atlases. The object is to map the wild populations using scientific methods. The Queen of Spain Fritillary appeared in Suffolk in 1991, and bred here until 1997. We do not know if it arrived as a natural migrant, or whether it was released. At present, there is a population of Marbled White flying in Ipswich's Landseer Park. We believe these were probably released, although we cannot be certain. Last year, Chalkhill Blues were found in West Suffolk, and we like to think that they made a natural re-colonisation from Cambridgeshire, but perhaps they were introduced. County Recorders tear their hair out over these uncertainties.

It is not that releases are necessarily wrong. There is a law against the release of alien species, but as Peter Rowberry points out, John Quinn's releases of Purple Emperor were not illegal. Releases that are properly planned, executed and notified in accordance with the Code of Conservation Practice for Invertebrate Translocation, published by Invertebrate Link (formerly better known as the Joint Committee for the Conservation of British Insects) can be said to be authorized. They have the seal of approval of the statutory body, Natural England, the Royal Entomological Society, the British Entomological & Natural History Society, Butterfly Conservation and the Amateur

Entomologists' Society. One crucial element of that process is that the release/translocation requires the consent of the landowner. Another is that details of the release or attempted re-introduction are notified to Invertebrate Link. A release that does not conform to these requirements may fairly be referred to as unauthorized.

John Quinn's releases were made without the landowner's consent, and were not notified to any of the partners of Invertebrate Link. Despite skipping the official process, his introduction appears to have resulted in the successful establishment of a breeding colony. For the record, it was retrospectively notified to the Suffolk Biological Record Centre and to Invertebrate Link, by me, soon after John gave me the details. There are some strong feelings on both sides of the fence. As the County Recorder (until recently) what I hated was the uncertainty of not knowing whether the insects had arrived naturally, or had been released. Provided the code had been followed, and the release notified, that agony was relieved, as we could separate introductions from our wild populations and pass valid information onwards for publication in the Millennium Atlas of Butterflies in Britain & Ireland and other scientific journals. A harsher negative view is simply that meddling with Nature is wrong.

Anyone wishing to better understand the safeguards arising from following the Code of Conservation Practice is advised to read it (See References below). Anyone planning to release insects should definitely read it thoroughly. [Read also Martin Warren's guidance on p.14 - Ed.]

Yours Earnestly,

Rob Parker.

References:

Invertebrate Link (JCCBI) (2010). Invertebrate Translocation – A Code of Conservation Practice. *Br. J. Nat. Hist.*, **23**: (2010) 207-217. Download from: <http://www.royensoc.co.uk/InvLink/Index.html>

Butterfly Conservation Sightings of non-native butterflies and moths Guidance for branches (August 2014)

Background

There have been several incidences of non-native species being recorded in the UK in recent years which has posed questions to BC Branches and volunteers. The additional guidance is intended to help branches to decide their response. Note that some of these issues are already covered in BC's Policies on Introductions and Re-introductions; and Collecting, Breeding and Photography; which should be read in conjunction with this guidance.

Legal situation

The introduction of non-native species into the UK is illegal under the Wildlife and Countryside Act (1981) and Butterfly Conservation does not support any such activity. If BC Branches or members hear of people deliberately releasing non-native species, they should strongly discourage such activity because it is against the law and also because it runs the risk of damaging the ecology of native species, for example by introducing non-native pathogens and parasites.

Accidental releases of non-European species

In many cases, it is clear that sightings of non-native species originate from releases of bred stock, for example non-European species which may have escaped from Butterfly Houses. Such sightings are of little relevance

to the work of Butterfly Conservation.

Sightings of non-native European species

Where European species are recorded near the coast, or even inland, it is often not easy to separate releases from natural migration. Sightings should be reported to the County Recorder (listed at <http://butrfli.es/BNMcontacts>) and notified centrally to Richard Fox, Surveys Manager (rfox@butterfly-conservation.org). Advice should also be sought from them before giving the sightings any publicity. There are pros and cons of publishing such records that must be judged on a case by case basis.

If it is possible that a migration is occurring, then it would be worth publicising sightings so that other observers can keep a look out (e.g. Long-tailed Blue). However, if a very rare migrant appears to have established a colony it may be best to keep details secret until any breeding can be assessed. There is a huge interest in photographing rare migrants which could damage a small breeding colony, and there is a risk that some people may want to collect the adults, or take eggs or larvae for rearing. If the latter is felt to be likely, it is best to keep the locality secret until the situation can be properly assessed in discussion with the County Recorder and Richard Fox (or Nigel Bourn or Martin Warren in his absence).

Established colonies of non-native species

We know that many species are spreading rapidly northwards in Europe due to climate change and some will inevitably arrive and establish colonies. For example, nearly 30 moth species have become established in the UK this century, some due to natural colonisation others as a result of accidental importation (e.g. in the horticultural trade).

If a non-native species succeeds in establishing a breeding colony (e.g. evidence of successful breeding over two or more seasons), by whatever means, our strategy should be to monitor the results so that it can add to our understanding of the impacts of climate change. The rearing and further release of the species should be discouraged so that we can learn the natural behaviour of the species in our climatic conditions. Again, such colonies should be reported to the County Recorder and Richard Fox and advice sought about any publicity.

Assisted colonisation of non-native species

Some naturalists are advocating that we help species adapt to climate change by “assisting” their colonisation of new countries. Aside from the legal issues, Butterfly Conservation believes that such measures should not be attempted at the current time as it would confuse scientific understanding of natural responses to climate change, undermine local conservation efforts in the natural range and might have unexpected adverse effects here, but will be reviewing this advice in coming years. There may be situations in the future where sedentary species in other parts of Europe are at high risk of extinction

because their original habitats are becoming unsuitable due to climate change and there is no possibility of natural spread. Assisted colonisation may thus be the only option to ensure their survival. If such cases do arise, we will consult widely with Lepidopterists across Europe to agree a continent-wide conservation strategy.

Butterfly releases at ceremonies

There is an increasing and disturbing trend of live butterflies being released at weddings, funerals and other ceremonies. In some cases such releases may be illegal. Butterfly Conservation strongly disagrees with this practice for four main reasons: 1) It disrupts natural distributions and the study of them; 2) Bred individuals may have different genetic traits compared to wild ones and releases may disrupt the genetics of natural populations; 3) There is a risk of spreading diseases into wild populations, especially from high density breeding and releasing programmes; 4) Such releases send the wrong message about human attitudes to nature and other living creatures and distracts from the real problems facing butterflies.

Martin Warren
Nigel Bourn
Richard Fox
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The Natural History Museum recreates itself online

The Museum has begun the huge task of digitising 20 million specimens onto a database that will be available to everyone. The website will also house scientific publications and papers generated by Museum staff, allowing all data to be used freely.

It will also mean that the curators can better search and manage their collections.

The initial digitising programme is expected to take five years, with the remainder of the 79 million records in the collection being uploaded over five further years.

The UK and Irish lepidoptera collection (butterflies and moths) was chosen to kick-start the iCollections project because it contains important scientific and historic information. The specimens were collected from the mid-1800s to the 1960s.

By comparing when the first butterflies appeared each year, the science of phenology, it's possible to see how the climate has changed

over the past 200 years.

Critical information written on small labels, giving details of who, why, when and where for each specimen, will be used to create digital maps showing past geographical butterfly hotspots around the UK, also useful for future conservation.

The painstaking work involves photographing every one of the half-a-million butterflies and their labels, uploading the images, entering the label data and then storing every specimen in new trays. So far, the team has entered 100,000 specimens. Following this rate of progress, it should take a year to capture this section of the butterfly collection.

Read about this project at

<http://www.nhm.ac.uk/research-curation/index.html>

The Natural History Museum grows butterfly wings in the lab

The Blue Morpho, *Morpho peleides*, is a striking, tropical butterfly that frightens potential predators by flashing its electric blue wings. However, their wings contain no pigment, the vibrant colours are the result of a phenomenon known as structural colouration. Their wings are made up of transparent scales that have intricate shapes. The scales scatter light when it hits them, creating brilliant colours that look different from different angles.

Everyday objects are traditionally coloured using dyes and pigments, which fade over time, whereas objects using structural colouration could retain their vibrancy forever.

Museum researcher Prof Andrew Parker and Dr Helen Townley of Oxford University successfully grew a butterfly wing in the lab so

that it had the right structure to produce colour.

These colour cells might help to produce long lasting, cheap and environmentally friendly paints and dyes.

Artificial structural colouration cells have previously been produced, but they are less intricate and the process is costly and slow. Mass-producing natural structural colouration from insect cells could be a cheaper and faster alternative.

As well as being cheaper to produce, materials that use the colours created by cells would be much more environmentally friendly than traditional dyes and paints that can release toxins into the environment.

The Monarch Migration

Every year, Monarch butterflies undertake an extraordinary journey. In their millions, they leave their summer breeding grounds in the United States and Canada and fly thousands of miles to a small area of alpine forest in central Mexico. The butterflies congregate high up into those mountains, above 10,000 feet, to spend the winter clustered on the branches and tree trunks of the oyamel fir forests.

After about five months, when spring warms up the forests, the Monarchs descend from the mountains and start their journey northwards. Those butterflies have flown almost 5,000 miles in the course of their lifetime. As they move into the southern U.S. a new generation of Monarchs is hatched and during the summer months three or four more generations will develop. By late summer butterflies that have never been to Mexico make the journey to the same mountains and forest in which their forbearers had wintered.

But Monarch butterflies are in trouble. The high mountain forests that shelter them during the winter months have suffered large-scale deforestation. Using satellite images it has been calculated that 1,110 acres of the monarch's forest habitat had been clear-cut or thinned by 2008. The Mexican government has taken steps to prevent illegal logging, but it hasn't been entirely successful.

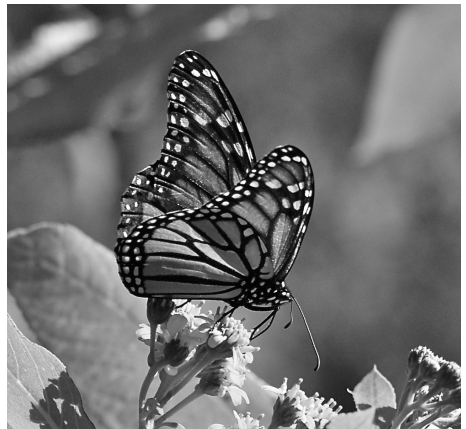
More recent monarch population declines result from widespread herbicide use in U.S. agriculture. Crops like maize and soybeans have been genetically engineered to tolerate weed-killing chemicals like glyphosate 'Roundup'. The herbicides don't kill the monarchs directly. Instead, they kill a key plant in the butterfly's lifecycle: milkweed. Monarchs lay their eggs on

milkweed plants during the spring and summer, and their caterpillar larvae use them for food.

Monarchs fell to their lowest numbers ever in the winter of 2013/2014. Scientists can't count the monarchs directly, so they calculate the area in which they winter. At their peak in the mid-90s, monarchs inhabited about 52 acres. This past winter they were found on little more than two acres.

Monarchs are still widespread, ranging from Australia to South America and the Caribbean. It is unlikely that the species will become extinct, but what is the future for the spectacular American migration?

In autumn and winter the Monarch can be found in the Canary Islands, Spain and Portugal. If you plan on a winter holiday there look for milkweed and you might be lucky enough to find not only the butterfly but also eggs, larvae and pupae.



Across the Border - Kelling Heath (May)

Helen Saunders

Kelling Heath SSSI, is a 250 acre area of heathland that lies virtually on the North Norfolk Coast.

In 2001 English Nature (now Natural England) launched a project to reintroduce Silver-studded Blue butterflies (SSB) to the heath, and since that time Norfolk County Council, Butterfly Conservation, Kelling Heath Trustees, local naturalist John Wagstaff and heathland contractor Kevin Jones have been working together to create the perfect conditions for the butterflies to spread into.

John has voluntarily spent 15 years working on habitat management both on Kelling and Salthouse Heaths, primarily for SSBs but also for reptiles and birds. Kevin, a local farmer, is contracted to carry out much of the work and together they have proved to be an amazing team.

The heath is used regularly by the general public, including dog walkers and bird-watchers. On the day we visited a group were patiently waiting to spot the Dartford Warblers.

Towards the end of World War II, the US Army Air Force created a temporary airstrip as a one-day exercise. It included a criss-cross of ditches, which still exist, as could be seen by the pattern of gorse growing along the lines. There are more details for those interested at the following link:

<http://www.heritage.norfolk.gov.uk/record-details?mnf23129>

As we toured the site John described how he plans ahead and is as much concerned with how he can extend areas used by the SSB, as he is with increasing their numbers. He is continuously thinking ahead, extending corridors and possible new breeding sites, whilst also maintaining established ones. Kevin explained the work he does – for example, forage harvesting, treating birch, clearing scrub – much the same as we have been doing at Purdis Heath but on a larger scale. In some places the heather sward had been cut to three different heights, while in others areas the same patch was cut short annually. Birch saplings were usually left until they reached around 5ft in height and then weed-wiped. Gorse was regularly cut short rather than being completely removed, partly because of the fact that SSBs use it as a larval host plant, but also because it is easier to cut it each year than trying to eradicate it.

As well as Bell Heather and Ling (John estimates at a ratio of 50:50), we also found Green-ribbed sedge, various colours of Milkwort scattered through the grasses and a large patch of Pirri pirri Bur. Although quite a cloudy day for butterflies, it was warm enough for us to see Viviparous Lizards and an Adder.

Numerous ant nests were seen as we walked and Kevin believes it is beneficial, in the

course of forage harvesting (cutting the sward), to remove mounds that form to reveal the ants underneath, something I had not come across before. His information suggests the Yellow Ants (*Lasius flavus*) tend to build mounds as part of their nest and that Black Ants (*Lasius niger*) then utilise these mounds but only use the underground parts and continue building downward.

The heath is bisected by the North Norfolk Railway and while there we were treated to the sight, sounds and smell of the steam train as it passed. Sparks from the train cause several small fires along the edge of the line every year, so revealing new patches of bare ground. Within a few years, new habitat has been created as ants move in and the new heather grows.

Patience and a thick skin have obviously been twin virtues at Kelling, since it has taken many years for John and Kevin to create the right conditions for both butterfly and ant. They have had setbacks along the way, including many of the same blights experienced at Purdis with littering, dog fouling and a small minority of unhappy members of the public. John has even suffered a broken car window after successfully taking legal action against a litter lout and although naturally finding this very upsetting, his resilience, desire and success in improving the status of the butterfly are, as he says, his number one priority.

John's records are evidence that the population of SSB is not only increasing in number but also in range across the heath. In 2013 the annual count of silver-studded

blue butterflies on Kelling Heath by John Wagstaff, was 562, compared to only 162 on the same day in July 2012. The site also provides good habitat for Wall Brown and Grayling, among the 30 species of butterfly found there.

We came away feeling enthused and encouraged by the success story at Kelling and positive about the changes at Purdis Heath, since much of the work is so similar. A lot of voluntary work has been carried out at Purdis over several years, with help from both Ipswich Borough Council and the Greenways team. More recently this has been boosted by WREN and Suffolk Butterfly Conservation's funding for The Ipswich Heaths Project.

It is not always easy to see ahead but I hope, that a few years on, we will start to see similar successes on the Ipswich Heaths as they have across the border.

Thanks to Mandy Gluth (Norfolk Branch) for arranging our visit.



Silver-studded Blue
by Beryl Johnson

Wall Survey, Orford Saturday 16th August 2014

Peter Maddison

I had had some success in the previous two years when searching for the Wall in the Orford area, and as a field event had not been held there since 2006, a return visit was due. Found only in a few coastal locations in Suffolk, the Wall fared moderately during 2013 at Orford, and my hopes were high that the good weather of early 2014 would favour the species this year.

On the appointed day 13 of us gathered at the car park and as we progressed to the quay I'm sure we were all quietly aware of the almost continuous layer of cloud and the stiff breeze that would not encourage butterflies into flight. Sheltered spots were going to be the likely haunts of nectaring butterflies and it was on a sheltered bank just before the path out to the Chantry Marsh that Alex Parker spotted a Wall.

Buoyed by our immediate good fortune we hoped that more would soon be seen, but the weather conditions on the exposed river wall were against us.

Perhaps the earliness of season had had an effect and the 2nd generation peak had passed already. It was pleasing, however, to record a Small Heath that popped up on cue where one of the colonies is quite strong on the Chantry Marsh.

Turning inland towards Richmond Cottages we noted Small Copper, Small Tortoiseshell and Small White, but all in small numbers. Several unidentified whites zoomed past, but the Clouded Yellow was unmistakable. In the sheltered spot towards the road Red

Admiral, Peacock, Speckled Wood and Small Tortoiseshell were watched as they nectared on bramble. Green-veined Whites and Large Whites were recorded.

The morning had passed and some of our group had to return to the town. Others followed the field path to the castle grounds and Holly Blue, Gatekeeper and Comma were added to the list. After lunch, on a shorter walk to the east of the town and down to the river, several of the common species were seen but we were not able to add to the 15 species that we had counted earlier nor were we able to improve on our solitary Wall sighting of the morning.

I had walked the course 11 days previously. It was a sunny day with just a light breeze and I had seen 7 Wall. My records for this year and previous years show that there is a slight concentration of the Wall around the Chantry Marsh but they can be found on the field tracks, the verges of the lanes within the town, the Churchyard and, as we recorded today, within 50 metres of the busy quay.



Small Heath at Orford
by Beryl Johnson

Kenton Hills and Sizewell 15th July 2014

Peter Maddison

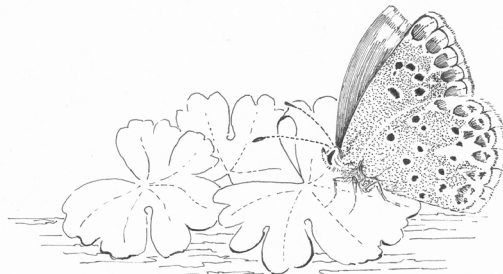
In the short time it took for the group to meet in the Kenton Hills car park nine species of butterfly were counted - perhaps we were going to have a good day! Passing through the immediate broadleaf woodland and on to the conifer plantation we stopped at the sheltered junction of paths to inspect the flowering and fruiting brambles for butterflies, but on this occasion we were out of luck. However, on the wide grass verge we noted Meadow Brown, Ringlet, Small Tortoiseshell and Speckled Wood, and towards the pond, a Grayling was recorded.

In the last few years several hectares of conifer have been removed from the sloping land adjacent to our route. This area is regenerating as heathland but the battle against bracken and bramble will be a long one. To the south of the path wet woodland joins the meadows of the Sizewell Belts. Honeysuckle scrambles amongst the trees and here the White Admiral is to be found - but not today! To view the species we had to continue to a junction in the path where oaks, honeysuckle, bramble and elm scrub abound, and here 3 White Admirals were soon found. Our path curved off around Goose Hill and on the sunny, sheltered track, rich in wild flowers and bramble good numbers of butterflies were seen. Another 3 White Admirals, and

Small, Essex and Large Skippers were added to our list. An adder crossed our path and a well-camouflaged Great Green Bush-cricket was seen. A Turtle Dove purred in the trees a little distance away. Wonderful moments tempered by the thought that these Suffolk Sandlings will become access roads and storage facilities if the proposed Sizewell C is to be built.

Lunch at the tank traps by the beach gave us time to observe the flora and Stella Wolfe identified an unusual white form of Restharrow. The grasses, Sheep's Sorrel and Bird's-foot Trefoil in front of the power stations yielded Small Heath, Small Copper, good numbers of Grayling and vivid Common Blues. Moderate numbers of the more common butterflies were seen as we continued our circuit inland and a pause for drinks by some of the oaks on Broom Covert gave us time to search for Purple Hairstreak - Roger Wolfe and Alan Johnson's patience rewarding them with a fleeting glimpse of a probable hairstreak high on the tree that they were observing. In the grass around our feet Brown Argus basked whilst on the track ahead of us Grayling rose, descended and disappeared, camouflaged as leaf litter.

Back at the car park the species count was checked, 20 was agreed but 21 if Roger and Alan's Purple Hairstreak were to be included.



Brown Argus
by Beryl Johnson

Scarce (Yellow-legged) Tortoiseshell *Nymphalis xanthomelas* in Suffolk 2014

Bill Stone

Introduction

The Scarce Tortoiseshell is a species of butterfly, similar in size to the Peacock *Inachis io*, which is local and uncommon within its range in eastern and central Europe. It is a species which favours damp woodlands and river valleys especially those containing willows and sallows. The flight period is normally from July through to September. The butterfly then goes into hibernation normally emerging again in April and May. It is univoltine. The only previously accepted record was at Shipbourne, near Sevenoaks, Kent in July 1953.

July 2014

On 14 July, Chris van Swaay of the Dutch Butterfly Conservation posted on the UK Butterflies website forum that good numbers of Scarce Tortoiseshell were being seen in the Netherlands. Other reports indicated that it was also appearing in Denmark, Sweden, Germany and Belgium. This is a butterfly, which like the other tortoiseshell species shows a strong migratory tendency and it seemed that a particularly good emergence across its home range had coincided with an unusual weather pattern. This had caused a strong flow of warm air from over Russia to push through central Europe and carry the butterflies north-west towards Scandinavia and the Low Countries. It, therefore, became apparent that this butterfly species could reach UK shores and in particular the south-east of England.

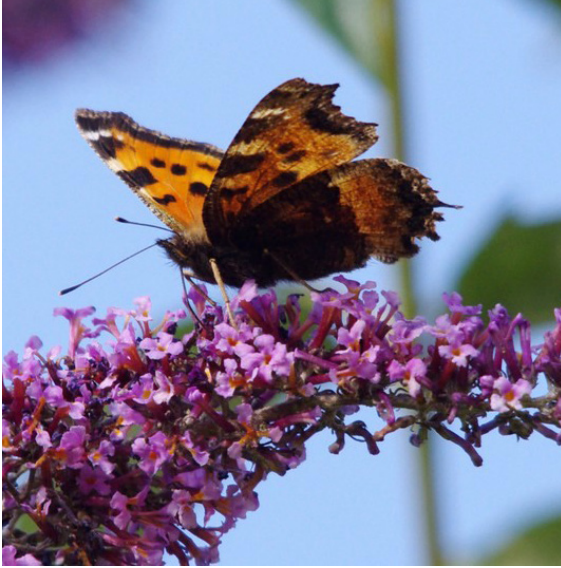
However, at the time of Chris van Swaay's post it appeared that the butterfly had already made it across the North Sea as during the evening of 14 July a number of Scarce Tortoiseshell butterflies were being reported along coastal locations in East Anglia.

Thankfully, Suffolk was lucky to share in this European butterfly event and we have had two confirmed records. Both butterflies were observed nectaring on buddleja and were identified as Scarce Tortoiseshells from the photographs and videos taken. One was found in the warden's garden at RSPB Minsmere by Adam Rowlands on 14 July 2014. It was also present again during 15 July. The second record was also found on 14 July by Perry Fairman at Marina Park, Burgh Castle. It was also observed during the 15 July.

For those of us that were not fortunate to see this vagrant in July then do not despair. There is a chance that others went undetected and that they may now be hibernating in the UK. Reports from Holland and Scandinavia in early August have revealed that several Scarce Tortoiseshells have been found hibernating alongside Peacocks and Small Tortoiseshells. Assuming they follow a similar pattern to hibernation emergence times in central Europe then early April 2015 may be a good time to look for another Suffolk Scarce Tortoiseshell!

Identification

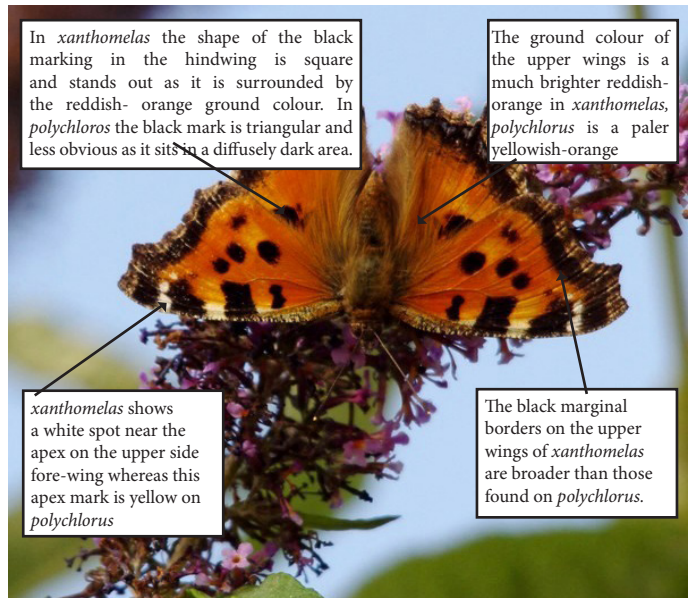
Scarce and Large Tortoiseshell (*Nymphalis polychlorus*) are very similar and it is feasible that *xanthomelas* has been overlooked in the past. The following photographs have been annotated to highlight key features.



Scarce Tortoiseshell,
Burgh Castle July 2014.
(Photos Perry Fairman,
Ecological Experiences)

The key identification feature, as the species' other name of "Yellow-legged Tortoiseshell" suggests, is the colour of the legs. On *polychlorus* they are dark brown/blackish and here on *xanthomelas* they are light brown through to yellow.

A number of other identification features should also be looked for when dealing with a possible *xanthomelas*:



In *xanthomelas* the shape of the black marking in the hindwing is square and stands out as it is surrounded by the reddish- orange ground colour. In *polychlorus* the black mark is triangular and less obvious as it sits in a diffusely dark area.

The ground colour of the upper wings is a much brighter reddish-orange in *xanthomelas*, *polychlorus* is a paler yellowish-orange

xanthomelas shows a white spot near the apex on the upper side fore-wing whereas this apex mark is yellow on *polychlorus*

The black marginal borders on the upper wings of *xanthomelas* are broader than those found on *polychlorus*.

Work at Purdis Heath ~ 'A Celebration of Volunteers'



Diggers move in to prepare the scrape



Ray barrows the first of the heather clippings



Ray and Val strew heather clippings



Dave and Kathy tackle gorse & brambles



Jacqui, Chris and Martin dragging gorse



A well-earned rest



Pete in the gorse



Rob barrowing clippings



Val tackling gorse in mature ling