

The 2013 Big Butterfly Race

Peter Eeles and Dan Danahar

On 19th July 2013, some of the UK's finest butterfly experts went head-to-head in an eccentric battle to claim butterfly bragging rights in Sussex and Hampshire. Two teams, both named after rare butterflies, scoured the two counties for "The Big Butterfly Race" armed only with their wits and a pair of binoculars to see which team could count the most species in a day. The "Wood Whites" (from Sussex), led by TV naturalist and Butterfly Conservation Vice President Nick Baker, toured Hampshire while the "Glanville Fritillaries" (from Hampshire), led by the National Trust's butterfly expert Matthew Oates, covered Sussex. The team members were:

Team Wood White (Sussex)	Team Glanville Fritillary (Hampshire)
<p>Bob Foreman Colin Knight Dan Danahar Jamie Burston Mark Colvin Martin Warren Neil Hulme Nick Baker (captain) Nigel Symington Patrick Barkham</p>	<p>Andy Bolton Arthur Greenwood Dan Hoare Ken Willmott Lynn Fomison Matthew Oates (captain) Paul Brock Peter Eeles Tim Bernhard Tim Norriss</p> <div style="text-align: center;"> </div> <p style="text-align: center;">Team Glanville Fritillary Ken, Tim B., Dan, Paul, Arthur, Andy, Tim N., Lynn, Pete, Matthew Photo © Tim Bernhard</p>

During the day each team followed separate and secret routes, dependent on the weather and known flight periods of different butterfly species. In their South Downs National Park Authority Land Rovers, each team worked with an adjudicator, from the respective County Wildlife Trusts, to ensure that no rules were bent. The Wood Whites worked with Debbie Tan, CEO of the Hampshire and Isle of Wight Trust, whilst the Glanville Fritillaries needed to satisfy the scrutiny of Tony Whitbread, CEO of the Sussex Wildlife Trust. This is a diary of how the day unfolded for the 2 teams - with 1 point given for each species seen, or 2 points if an immature stage is found. The team Wood White account has been written by Dr Dan Danahar (Big Butterfly Race Organiser) and the team Glanville Fritillary account by Pete Eeles (chairman of the Hampshire & Isle of Wight branch of Butterfly Conservation).

0800 - 0930	Team Wood White (Sussex team in Hampshire)	Team Glanville Fritillary (Hampshire team in Sussex)
	<p>The teams meet at the rendezvous point in the car park near the Anchor Bleu pub in Bosham on the Hampshire / Sussex border. Both teams spend much of the time giving interviews for local radio stations with the bullish behaviour masking trepidation of the day ahead! The start is slightly delayed while the last of the interviews is concluded and the BBC cameras crews get the footage they need. At 0920 both teams head to their respective starting points and at 0930 the race is officially started!</p>	

0930 -
1000

The energy and excitement at the beginning of the race was tangible. Everybody was just itching to get started but because the local BBC news crew was with us all day, they needed time to get the footage they required. Finally, with the start of the race filmed, I ran back to my car where our own independent cameraman was waiting to film the Land Rovers as they passed by. We waited for what seemed like an eternity and there was no sign of either of the two teams. I walked back to the starting point, where I found both teams in their Land Rovers, engines turning. What on earth could be the problem I thought? It transpired that as the Big Butterfly Race organiser, I had failed to consider the need for somebody to start the race! This was quickly resolved and they were off! Both vehicles moved so fast in fact that we almost lost them within the first 5 minutes of the race starting.



The BBC start their day's filming
Photo © Dan Danahar

The first butterfly seen by Team Wood White was coincidentally a 1) Large White, spotted by team Captain Nick Baker. This was followed quickly with a 2) Small Tortoiseshell, both species being seen before the team arrived at their first site: **Browdown** (SZ579995). As race organiser I had left our route planning to Neil Hulme. The route was only really finalised on the day but Neil had been thinking strategy for weeks. At Browdown the target species was the Grayling. We all knew that for Team Glanville Fritillary to bag a Grayling they would have to travel across to East Sussex and so we had reasoned that they wouldn't do this because of time constraints. So Neil argued that spotting a Grayling early in the competition would be a good tactical score, likely to hit the other team hard, when they picked up on it via the live Twitter feed.

On arrival at Browdown the team discovered butterflies galore and with the excitement of a pack of laughing hyenas around a kill, they verbally dissected the butterfly assemblages before them: 3) Small Skipper, 4) Marbled White, 5) Small Copper, 6) Meadow Brown, 7) Gatekeeper, 8) Large Skipper, 9) Small White, 10) Essex Skipper (Patrick Barkham spent more time on his knees than I would have cared to do, in order to confirm this identification) 11) Green-veined White, 12) Ringlet and of course 13) the Grayling. The poor BBC Cameraman trudged across uneven terrain with his heavy camera, only to find that the insect had departed seconds before.

1000 -
1100

Very happy with such a quick and high species tally we made for the pavement on the A27 just outside the Lakeside offices in **Cosham** (SU650051). Here our target was the White-

We head off down the path onto the common, making sure that we stayed close to our adjudicator, Tony, without whom any sightings were redundant! A search for Green Hairstreak



Captain Oates briefing the team
Photo © Tim Bernhard

With the race now underway, all eyes were peeled as the team headed to the first site. Within a few minutes a 1) Large White was spotted from the Land Rover - the first point on the board for Team Glanville Fritillary and a good omen for the day ahead!



The Team Glanville Fritillary Van!
Photo © Andy Bolton

The team eventually arrives at **Iping Common**, a site known for its Silver-studded Blue colony. Almost immediately, Pete finds some 2) Red Admiral larvae in their usual place, tucked up inside a rolled-up nettle leaf that is their home - and another 2 points in the bag. A 3) Small White was found flying around the car park, along with a couple of 4) Large Skipper, giving another 2 points. The team is up to 5 points and we've yet to leave the car park!

letter Hairstreak. One of the competition's rules was that there should be no entering of private land, so the team peered from the road trying to point out the chocolate Tortoiseshell butterflies to our adjudicator, Debbie Tann.



All look out for the "Chocolate Triangle"
Photo © Nigel Symington

Whilst most team members did this Bob Foreman and I crossed the central reservation to look on the concrete island, for more common species. Here we were of course lucky to see both a 14) Comma and a 15) Brimstone. However, there was no luck to be had with the White-Letter hairstreak and so disappointedly, we travelled on to our next site, rather than waste any more time.

larvae on the Gorse failed to deliver the goods, although the team did notch up 3 more points with sightings of 5) Meadow Brown, 6) Ringlet and 7) Gatekeeper.



Both Land Rovers displayed the team's logo
Photo © Pete Eeles

We moved on to the best area for the 8) Silver-studded Blue, where several individuals were flying. A few of the team stayed around for 10 minutes hoping that one of the few females that were being watched would lay an egg, but it was not to be and we had to live with the 1 point for spotting the adult stage. Several Dark Green Fritillary were also seen but not, alas, by our adjudicator!

1100 -
1200

Traveling up the A3, slightly miffed at having lost time by looking for the White-letter hairstreak, the team Wood White Land Rover suddenly lost control. It started wobbling from side to side and then skidded across two lanes of the A3, ending its journey on the hard shoulder! We were all quite shaken by this event but the driver, Caroline, did a fabulous job of dealing with the incident and after all team members and the vehicle were checked, the team was once again on its way.

As we pulled up on the layby at **Broxhead Common** (SU804374) I saw a blue land on a bramble flower. It was a 16) Silver-studded Blue, one of the easiest sightings of the whole day. This was the target species for the site and so we then prepared to drive off but just as we were about to leave a 17) Small Heath flew by. This was becoming just too easy.



A five minute stop at Broxhead Common
Photo © Martin Warren

Back at the car park a 9) Comma was in egg-laying mood, but 5 minutes passed before, eventually, Tim Bernhard finds one of her eggs on the tip of a nettle leaf, giving the team 2 points for this species. With Iping Common now done and 11 points in the bag, we headed off to the next site. Having visited heathland, our next stop was a visit to the mature deciduous woodland of **Southwater Woods**.

As we got out of the Land Rover we could see 10) Silver-washed Fritillary flying past at high speed, the first new species for the site. The reason for stopping where we did was to see if we could get a glimpse of His Majesty, the Purple Emperor. It's a good job we looked skyward since, at that very moment, a 11) Purple Hairstreak was seen flitting around the oak canopy, and is the only sighting of this species we had!

1200 -
1300

Our next stop was **Goose Green, Alice Holt Forest** (SU805416). Here in quick succession we picked up more new species: 18) Silver-washed Fritillary, 19) Speckled Wood and 20) Purple Hairstreak but we had come to the site for the

We'd almost given up hope of seeing a 12) Purple Emperor when, at last, a majestic male sailed into view long enough for Tony to verify the sighting - relief all round! We were, however, still missing White Admiral and decided to walk

Purple Emperor and although many of the team were getting fleeting glimpses of the butterfly, high in the surrounding canopy, not once did our adjudicator see it. We were in a glade, which had one tall tree growing in the middle of it. This tree obscured one's line of sight, no matter where you positioned yourself in the glade. Things were getting a little desperate and every time a member of the team shouted out "Purple Emperor" Debbie Tann would run to the side from which the call had come, only to find that she was too late to see the insect. This "palaver" carried on for a good 25 minutes but eventually she saw the butterfly, not a good view but good enough to score the point. We had the 21) Purple Emperor!



We spy the canopy for our target species
Photo © Nigel Symington



Dan Danahar takes a moment to interview Patrick Barkham
Photo © Nigel Symington

down one of the many paths to see if we could locate one. In the shade we found a number of 13) Speckled Wood dancing around in the dappled sunlight. We also decided to stay and watch patiently as a Silver-washed Fritillary descended to the floor to sniff out violets, the larval foodplant, before alighting on a nearby tree trunk to oviposit. Despite some very obvious egg laying, none of us could find the egg, including the BBC camera crew that had been following us around all morning!

Having exhausted our allotted time, and now up to 15 points, we decided to move to another part of the wood in the hope of finding something new. This was a good move, since rummaging around a few clearings gave us sightings of 14) Green-veined White and 15) Small Skipper. The discovery of a 16) Small Tortoiseshell larval web gave us 2 more points, bringing our total to 19 points.

The team regrouped and was rewarded with a sighting of a spectacular male Purple Emperor that flew around us in tight circles, giving tantalising glimpses of its purple sheen, before landing on a favourite meal of dog poo! We were all entranced, but had work to do since watching in awe of this spectacular creature wasn't getting us any points!



His Majesty
Photo © Paul Brock

A little further on and our target, a 17) White Admiral, is finally seen by Arthur. While watching this insect glide around its woodland home, Tim Bernhard scoured various Honeysuckle plants and eventually scored with a White Admiral egg, bringing our grand total to 21 points.



White Admiral egg
Photo © Tim Bernhard

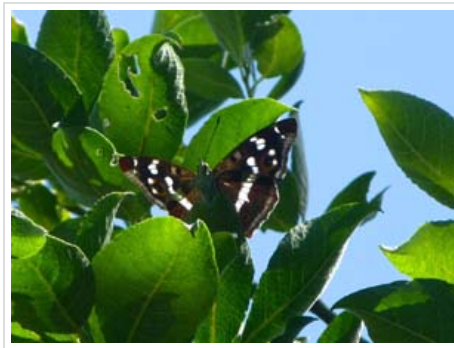
1300 -
1400

By the time we had arrived at **Straits Enclosure, Alice Holt Forest** (SU804400) the heat of the day was beginning to frazzle the team and our energy levels were a little depleted. However, within minutes of being on site Jamie Burston found some Small Tortoiseshell caterpillars. This was a boost

With another change of habitat required, the team headed down to **Mill Hill**, quickly grabbing lunch when we arrive. We immediately notch up some new species as we head onto the hill - with 18) Common Blue, 19) Marbled White and 20) Small Heath. Unfortunately, the hill is much drier than

because although we had already seen this species as an adult earlier in the day, we all knew that seeing any other stage in the life cycle automatically gave us an extra point. This was followed quickly by Bob Foreman finding a 22) Chalkhill Blue, which was a mystery to most of us because the insect was certainly out of its normal habitat!

Neil Hulme lead the way and quickly pointed out both a 23) Red and 24) White Admiral flitting along the ride edge. I thought I saw another White Admiral and then realised that it wasn't an Admiral at all, rather an Emperor and it came to rest above my head in a Sallow tree overhanging the ride. The team quickly gathered around and we all stood in awe for some time, gaining fabulous views of the butterfly. For several in the party this was the first time in their lives that they had seen a Purple Emperor. I distinctly remember Nick Baker say, "It's like looking at a living stained glass window", as he gazed in wonderment.



The living stained glass window

Photo © Dan Danahar

In the meantime, Nick Baker and Colin Knight, who had been on nettle duty, found a Comma caterpillar and then Mark Colvin pulled a rabbit out of the hat when he found a beautiful Green-veined White chrysalis on the support poles of a wooden deer watch tower - both earning an another extra point each and for once this was an easy sighting to show to our adjudicator. Both the delightfully spiny Comma caterpillar and the miracle of engineering in green, that was the Green-veined White, demonstrated the beauty of butterflies, not just in the adult form but also in the earlier stages of the life-cycle.



Dan Danahar & Neil Hulme reflect on the importance of the Big Butterfly Race

anyone expected, clearly having been baked in the sun for the last couple of weeks, and there were slim pickings.

Fortunately, we came across a patch of Kidney Vetch and, lo and behold, a 21) Small Blue larva is found by Dan nestled within a flowerhead - 2 more points!



Small Blue larva

Photo © Paul Brock

A Purging Buckthorn was closely examined by several team members and most had drifted away when, finally, an early-instar 22) Brimstone larva is finally found.



Brimstone larva

Photo © Tim Bernhard

Butterflies are few and far between, but Matthew managed to find a mating pair of 23) Essex Skipper sheltering in some long grass. With 8 more points in the bag, our total now stands at 29 points.



Essex Skipper

Photo © Paul Brock

Photo © Mark Colvin

Shortly afterwards Nigel Symington shouted out "25) Peacock" as the beautiful creature flew directly through the group, tipping its wings to our adjudicator as it passed by. We felt we had found our second wind now.

En route to Old Winchester Hill, we made an unplanned stop at a pub on the A32, not for a drink but to inspect their Nasturtium filled hanging baskets instead. Here the team found both Small and Large White eggs, another two easy but critical early-stage bonus points.

Our visit to **Old Winchester Hill** (SU643213) was brief in the extreme, we went there for the 26) Dark-green Fritillary, which Neil Hulme spotted almost instantaneously. For a while we walked aimlessly on the chalk grassland slopes, admiring the view, before realising that we were better off returning to Cosham. Here we aimed to see if we could get the one that had got away, at that point our only failure to find a target species, the White-letter Hairstreak.



The view from Old Winchester Hill

Photo © Neil Hulme

Our arrival at the busy roadside verge felt like a case of Deja Vu. However, on this occasion we were successful because a single 27) White-letter Hairstreak danced for all to see, above the Elms we were watching.

Now we were running out of species to search for and a quick discussion led to us deciding to go in search of Small Blue larvae.

Moving onto the main part of the hill, things are getting tougher as there are fewer and fewer new species to be found. A fly-past of a Peacock is seen by 2 members of the team, but not by our adjudicator! A single male 24) Chalkhill Blue is found on one of the steep south-facing slopes, but it's proving very difficult to find any decent patches of larval foodplant that haven't suffered in the heat. A search of some Tormentil reveals a tiny caterpillar which, unfortunately, turns out not to be the Grizzled Skipper we'd hoped for.



Showing Tony the Grizzled Skipper larva that wasn't!

Photo © Pete Eeles

While lamenting the fact that our adjudicator hadn't seen either a Dark Green Fritillary at Iping Common, or the Peacock at Mill Hill, a 25) Dark Green Fritillary flew right past us! With much excitement, some of the team ran after it, ensuring that Tony got a good enough sighting for it to count. Phew! Moving on to another part of the hill didn't give any new species, but Ken managed to find an egg-laying Small White, ovipositing on Mignonette. Although we'd already seen Small White, the sighting of an immature stage gave us another point. Our tally was now 32 points and we needed to squeeze every last drop out of the time left.

1400 -
1500

1500 -
1600



With so few species left to find, we decided to "take a punt" and headed to **Littlehampton** where White-letter Hairstreak were known to fly. The traffic, unfortunately, was horrendous, and we eventually arrived having lost 30 minutes. Parking up next to a bridge on the A259, most of the team headed off to an area where we believed there to be a good number of scrubby Elm plants. Unfortunately, very few could be found, and we retraced our route back to the Land Rover.

Some of the team, however, had decided to stay next to the Land Rover to survey some Elm that was growing right next to this very busy road. I think everyone was surprised when Matthew spied a single 26) White-letter Hairstreak looking

Which way to Paulsgrove?

Photo © Martin Warren

After a little discussion about where to go next, we decided upon **Paulsgrove Quarry** (SU634065) because it was relatively near to our current location and it presented the distinct possibility of having the Small Blue larvae that we so desperately needed. When we turned up at the quarry, we discovered what looked like a good omen; we had parked in "Butterfly Drive".



This must be the right place

Photo © Martin Warren

We soon realised why the road had been given this name because the quarry was littered with Buddleia bushes. This appeared to be an unexpected bonus, so whilst half of the group searched amongst the Kidney Vetch for Small Blue caterpillars, the remainder were searching the Buddleia for migrants like Painted Ladies.

We looked hard and long for the caterpillars and the level of concentration was intense. Eventually, after a couple of false alarms, Martin Warren discovered what we were looking for, the 28) Small Blue caterpillar. Perhaps not the prettiest caterpillar to be seen but it was a stunningly good find, adding a new species to our list and an extra point because it was an early stage.



Martin Warren's Small Blue caterpillar - was this two pointer the competition winner?

Photo © Dan Danahar

down on us, within 10 feet of where we'd parked! We were now on 33 points!



Where to go next? Time is running out

Photo © Tim Bernhard

1600 -
1700

This was the third year that I had run a Big Butterfly Race and so our team knew from experience that we could not allow our guard down at any point. We were running out of species to look for but we had to think creatively and so we headed for **Warblington Church & Cemetery** (SU728053) in the hope that we might find a Holly Blue or a Painted Lady,

With time definitely not on our side, we came up with a tactic that would hopefully net us some immature stages - visiting a churchyard at **Clymping**. We were hoping to find Holly Blue larvae on Holly, or Small Copper on Sorrel - but neither materialised.

Just when we thought we were done for the day, Ken

since we'd failed to find either at Paulsgrove. We even searched old hedge mustard stems for Orange Tip pupae.

In the last frantic moments before our adjudicator called time, I watched Hulme and Barkham irreverently jumping graves following female Meadow Browns, in the hope that she might lay an egg.

However, time was called and it was now in the hands of the gods. We knew that Team Glanville Fritillary was a strong team but we had worked really hard all day long. We were proud of our team effort, so all stood in a circle and patted the back of the man standing next to us.

I had instructed the adjudicators to compare notes when they met back at the Anchor Bleu pub and all participants were asked not to talk about what they thought their scores were. By doing so I hoped that the results would be a real surprise when revealed on live T.V.

For now our job was done and we settled down with our worthy adversaries to celebrate, over some beer, about a job done well. As Neil Hulme said to me later "Not least, I will remember the day for the camaraderie and good spirits in which the teams competed. Lynn Fomison of Team Glanville even presented Team Wood White with one of her famous cakes. This is typical of the butterfly-watching community".



Better than cricket and with all the benefits, both teams relaxed in the garden of the Anchor Bleu pub

Photo © Martin Warren

Willmott found an ovipositing Meadow Brown! With minutes to spare we'd managed to grab an extra point - but would it be enough? With 34 points in total (26 species with 8 immature stages) we headed back to the pub to await the final result!



Ken Willmott and Tim Norriss examining a Meadow Brown egg

Photo © Pete Eeles

1700 -
1800

Ultimately the result was a real surprise and when it was announced we all jumped for joy, for the region's television viewers to witness.

I think both teams were surprised, to say the least, that we'd both scored 34 points in total! Between them, the judges decided that the team with the most species was the winner - and that was Sussex! If only they'd decided that the team with the most immature stages was the winner - then we'd have won! Anyway - nobody was able to ignore the fact that the butterflies had put on a spectacular show at a time when butterflying really hasn't been this good for many a year. And, of course, the plight of our butterflies received much-needed publicity as a result!

Concluding remarks from Dan Danahar, race organiser

Clearly the Big Butterfly Count is an important means by which we can engage the public with our work. The message associated with the Big Butterfly Count has been that this type of citizen's science is a critical means by which we can take the pulse of the nation's wildlife. Not forgetting of course, the invaluable data that is also collected in more "formal" surveys, conducted by hundreds of expert volunteers up and down the country every year.

But I think there is more to it than that. What's at the heart of the Big Butterfly Count? It's that on an individual level the natural world holds meaning for us. For those of us who have been bitten by the nature "bug" this is easy to understand, but for others it's perhaps not so clear. It's an intellectual pursuit, yes, but what many fail to see is that it has an emotional resonance.

When I first started working with Nick Baker we were trying to engage the public in Brighton & Hove, to count our local butterflies. One PR stunt we undertook was to get Nick up into the canopy of an Elm, to see the White-letter Hairstreak. We had done the same with David Bellamy and the local fire brigade raised him up, over 20 meters high into the canopy. He and local councillors had great views of the butterflies and so this was an obvious trick to repeat with Nick Baker. Sadly, on the day the fire brigade was engaged with, of all things, a fire! So we jumped into our land rover and went off road, around Brighton, trying to see as many species of butterfly species as we could. The Land Rover was filled with middle-aged men and as we discovered every new species so the camaraderie and sense of bonhomie increased. Further still came excitement and masses of enthusiasm for what we were doing. I started thinking "hang on a moment, we are on to something here"!

And so the Big Butterfly Race was born, last year it was between two teams in west and east Sussex, this year the counties of Sussex & Hampshire. It's clear to me that if we are to hope to engage the public more with our cause, we must let them know why we think its important on an emotional level. This is why when the live TV cameras were rolling I was insistent that we all scream, jump and shout with joy, no matter what the competition result. This is because I have come to learn that such enthusiasm is infectious.

- Dan Danahar

Thanks to ...

- Tony Whitbread, CEO, Sussex Wildlife Trust
- Debbie Tann, CEO, Hampshire and Isle of Wight Wildlife Trust
- Margaret Paren, Chair, South Downs National Park Authority
- Bill Smith, [Great Takes TV](#) for providing video footage used to publise the event

Coverage in The Guardian

Guardian journalist Patrick Barkham wrote [an accompanying piece for the race](#) and produced [an excellent audio slide show](#) with photos by Graeme Robertson.

BBC South Today footage

2012 Butterfly Race (by Adliberate)

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