

# British Dragonfly Society Sussex Group Newsletter Autumn 2014

No 33



## A Warm Welcome to the new President of Dragonflies!

We are very pleased to announce that our very own Dave Chelmick of Sussex Dragonfly Society (SDS) and Wealden Dragonfly Group (WEDG) notoriety has recently been made President of the British Dragonfly Society (BDS). Bringing his combination of inimitable charm, and over 40 years of experience working on dragonflies both at home and abroad, Dave will be a huge asset to the BDS.

Mister Chelmick has developed a particular interest in recent years in Zygoptera (damselflies), and in particular the genus *Ischnura*. He is often to be seen wading around in rivers, and ponds, tracking down new records of under-recorded species.

If you want to know more about him and his new role, then visit the BDS website, [www.british-dragonflies.org.uk](http://www.british-dragonflies.org.uk), Dave's own website, [www.macromania.com](http://www.macromania.com) or find him on Facebook.

## Sussex Dragonfly Society Newsletter

# Do Dragonflies Smell !?



Dragonflies are full of surprises. They have six legs, but most can't walk. Their giant, 30,000-lens eyes can detect ultraviolet light, and though they lack the brain architecture normally required for a sense of smell, a new study finds that dragonflies may use odours to hunt prey.

Smelling, as we humans understand it, requires certain hardware. Our noses are packed with olfactory receptors, tuned to precise scent molecules in up to a trillion different smells. When a smell wafts into human nostrils, these receptors send nerve signals to sensory stations called glomeruli, which pass them to the brain for interpretation. Glomeruli are common to most terrestrial mammals and insects, and until now, scientists believed they represented the only possible route to a sense of smell. Because dragonflies and their close cousins, damselflies, don't possess glomeruli or any higher order smell centres in their brains, most scientists believed that they were unable to smell anything at all.

However, at the University of Perugia in Italy, they took a closer look at dragonfly and damselfly antennae with an electron microscope, where they spotted tiny bulbs in pits that resembled olfactory sensilla. Like the insect equivalent of a nose, sure enough, these sensilla house olfactory neurons. When Reбора's team exposed the suspected sensilla to scents, they emitted nerve pulses, supporting the idea that damselflies and dragonflies perceive odours.

But to count as a sense of smell, the sensilla would have to do more than chemically react to scents. Their signals would have to actually affect behaviour in dragonflies and damselflies. So the researchers built a wind tunnel where fruit flies—a dragonfly delicacy—were concealed behind a screen through which odours could pass. Dragonflies gravitated to the spot on the screen on the other side of the fruit fly cluster, providing the first evidence that scents guide their behaviour.

The results have triggered quite a debate over what a bona fide sense of smell truly looks like. It is likely that the dragonflies ability to detect a range of odours is strongly limited, but this new view into how olfactory structures are organized poses some interesting questions. The biggest lesson to be learnt from this however, is that humans should be careful before declaring an animal or insect can't sense something,

<http://news.sciencemag.org/biology/2014/03/dragonflies-lack-smell-center-can-still-smell>

# Dragonfly Volunteers line up on the ARC

Dragonfly surveying has been hotting up this year, as we attempt to record dragonfly populations across a whole 77,000 hectare river catchment! We're nothing if not ambitious! But we believe that the changes which affect dragonflies and damselflies occur at landscape scales, and so we are increasingly trying to establish some of the wider trends in dragonfly and damselfly populations across large geographical areas.

In a bid to enthuse local people about these incredible aerial acrobats which inhabit their back yards, the Arun and Rother Connections project (ARC) sponsored a Dragonfly training day for local enthusiasts, volunteers and those of us who just needed to brush up on our ID skills in the Arun & Western Rother River catchments.

Hosted by the RSPB, and lead by the lovely Simon Curson, we spent an enjoyable morning in the classroom devouring equal amounts of information about dragonflies and damselflies, and delicious cake, before heading off in the afternoon on a dragonfly safari around Pulborough Brooks and Wiggonholt Common.

We are grateful to everyone who turned up on the day, and for all those of you who have been sending in your dragonfly records ever since. Its fantastic to be working with so many of you to record dragonflies at such a large scale. If you would like to get involved please contact [Debbie.Coggles@rspb.org.uk](mailto:Debbie.Coggles@rspb.org.uk) . You can sign up for our free dragonfly training day next year, or you can just head out under your own steam and upload your dragonfly records to iRecord or send them to [pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk).



# Dragonflies and Climate Change

Meanwhile, a team of researchers have discovered that insects in Europe with a lighter colour are learning to thrive in a warming climate. The multi-institutional team examined butterflies and dragonflies that are lighter than some of their peers and found that these insects may already be adapting to global warming. With the help of scientists at the University of Copenhagen and Imperial College London (ICL), the researchers made obvious links between the light southern insects and the dark northern ones to their home climate. When studying biodiversity, we lack general rules about why certain species occur where they do. This research has been able to show that butterfly and dragonfly species across Europe are distributed according to their ability to regulate heat through their colour variation.

For the study, the researchers analyzed digital images of 473 different species of butterflies and dragonflies then compared them with data on their habitats. They found that their colour was as tied to their climate as it is to other mechanisms, like camouflage. Although it may seem like common sense, we now know that lighter-coloured butterflies and dragonflies are doing better in a warmer world. The research has also demonstrated that the effects of climate change on where species live is not something of the future, but that nature and its ecosystems are changing as we speak.

The research has been able to show how changes in butterfly and dragonfly species across Europe occur according to their ability to regulate heat through colour variation. Now we have an idea of what could be a strong cause of the changes. It's a good example of how the GAIA theory of daisy world is working as we speak.



# Connecting Dragonfly dots on the Arun & Rother

This year, the Arun and Rother Connections project (ARC) funded a professional survey of the Arun & Rother rivers for dragonflies and damselflies. With over 60 km of waterway surveyed, and 26 species recorded (16 of which were confirmed breeding), the survey has added a significant amount to what we know about dragons and damsels in the area, helping us to understand how to help protect and preserve these beautiful insects.

Results suggest that numbers of Scarce chaser, Emerald damselfly and White-legged damselfly were all low in 2014, but rarities such as the Emerald damsel, Hairy dragonfly and the Club-tailed dragonfly were nonetheless present, and some thriving. Having learnt of reports of Club-tailed dragonflies appearing as far down the catchment as Arundel where the river is tidal, we particularly wanted to learn more about how far and wide this distinctive dragonfly was distributed, and what habitats they were using.

In fact, our surveyor, Dave Sadler was able to witness some unique behaviour from the Club-tail which even he had not witnessed before. Contrary to some opinion, it seems that Common Club-tails do not always emerge in the mornings. On non-tidal rivers, such as the Rother, where water levels do not rise, morning emergences are more likely, but on tidal rivers, such as the lower Arun, emergence necessarily takes place on the falling tide to avoid inundation by salt water.



Female Club-tailed dragonfly with egg mass © D Sadler

Thanks to the survey, our knowledge of the parts of the catchment where the Common club-tail can be found along the river has greatly increased, and we hope to learn much more over the next few years about these unique dragonflies, and many of their counterparts.

To learn more about the ARC project and its work, go to :-

# Grants for Saving Dragonflies

**Would you like to help dragonflies by restoring wetland habitats and making people aware of how amazing they are? If so, Grants are available for the next two years in the Arun & Rother River Valleys in West Sussex**

A total of £33,000 is available to local communities in the ARC project area until August 2016. The money is to help support local groups and communities to implement a range of habitat, wildlife, access and education improvements in the ARC project area. Grants of up to £1000 are available to apply for at any time, with a simple two page application form. The sorts of things we can help fund include:

- Site management plans or surveys for local wildlife sites
- Barn owl boxes, bat boxes, mammal cams etc
- Tools and equipment to help volunteers carry out conservation work
- Health and safety equipment for volunteer groups
- Training for local people and groups
- Access improvements
- Interpretation (leaflets / boards etc)
- School grounds enhancements
- Work to enhance and re-connect species / habitats
- Hedge & shaw planting
- Pond & scrape creation
- Fencing and countryside furniture
- Local events
- Wetland habitat enhancements — including fen, wet meadow, reedbed, wet heath and wet woodland restoration.

We would welcome applications from people in the project area who would like to carry out enhancement work for dragonflies. The project area stretches from Littlehampton to Horsham and West to Petersfield.

To discuss a project idea please contact Fran Southgate, ecological advisor on 01273 497555 or email [fransouthgate@sussexwt.org.uk](mailto:fransouthgate@sussexwt.org.uk) or Debbie.Coggles@rspb.org.uk. You can also find more details about the ARC project at [arunwesternstreams.org.uk/projects/arc](http://arunwesternstreams.org.uk/projects/arc)

# The creator of the Dragonfly Swarm Project, discusses how citizen science can impact the study of dragonfly behaviour



Sometimes science is hard. If you want to study something that happens slowly, is rare, or requires thousands of observations, it can take a lifetime to answer even the most basic questions.

Thankfully, we live in the age of the internet, where information and willing helpers are readily available at the tap of a screen or a click of a mouse. The internet has revolutionized science as we know it and has allowed scientists to start answering some of those big or hard questions by inviting participation by citizen scientists. Citizen science today allows us to gather information on an unprecedented scale and is starting to shed light on difficult scientific problems by getting more people on the ground in more places than scientists could ever hope to reach on their own.

Dragonfly swarms are one of those difficult problems to solve scientifically. Researchers have known for decades that you occasionally find huge groups of dragonflies either flying over a well-defined area as they feed on small insects (what I call static feeding swarms) or moving from one area to another in large migratory swarms. However, both behaviours are rarely observed and are unpredictable, which makes them incredibly difficult to study. Even if you actively look for swarms, you may only see a couple dozen over your entire life. (Chris has seen 11 so far, and that's a LOT more than most people will ever see!) One person's swarm observations are not enough to answer the larger questions about what role they play. Citizen science comes to the rescue!

In 2010, Chris Goforth created the [Dragonfly Swarm Project](#) as a way to answer big questions about dragonfly swarming behaviours. By simply asking people who have seen swarms to share their stories, he has so far been able to gather over 3100 observations of this rarely observed behaviour worldwide. With the help of citizen scientists, many of whom have only seen a single swarm, huge amounts of information and some very interesting observations have been gathered.

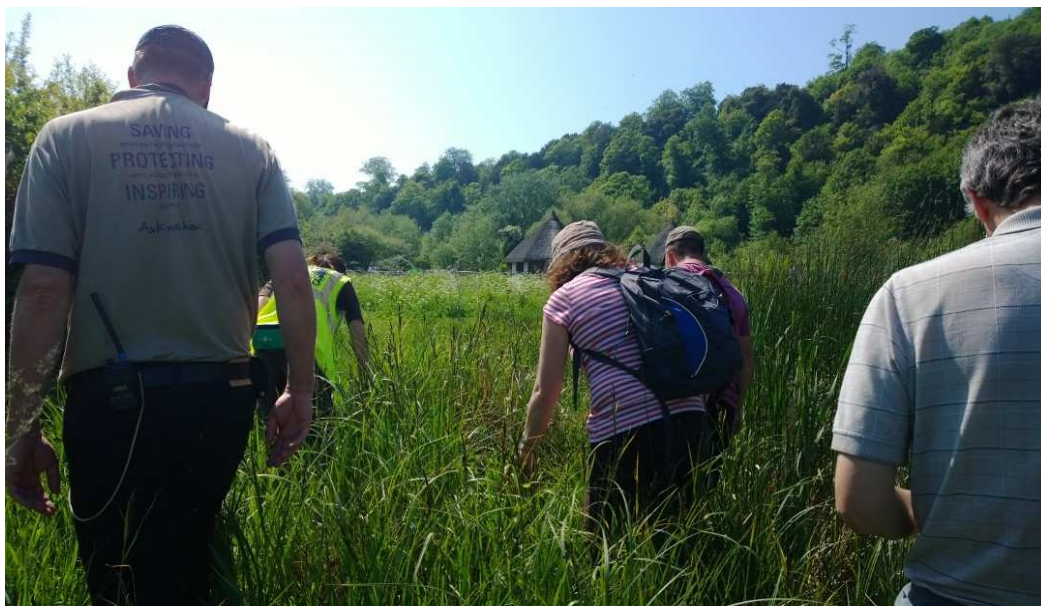
# Citizen Science Continued ....

Static dragonfly feeding swarms tend to form in areas where disturbances have occurred, such as exceptionally strong winds, severe thunderstorms, floods, or wildfires. When a disturbance moves through an area, millions of small insects become suddenly displaced. Other disturbances, such as floods, can increase the amount of breeding habitat for some insects, resulting in population explosions. In either case, you'll see huge numbers of insects in abnormal places with dragonfly feeding swarms forming shortly afterwards. Chris believes that dragonfly swarms help restore the balance of nature after disturbances by controlling these surges in prey insect populations.

Migratory swarms, in contrast, come in two types. There is a huge annual autumn migration of dragonflies along major rivers and coastlines in North America where millions to billions of dragonflies fly from their summer habitats thousands of miles away to warmer, more hospitable places for the winter. However, large groups of migratory dragonflies may also occur whenever conditions deteriorate in an area and thousands or millions of dragonflies suddenly move en masse to a better location. This sort of migration is much rarer and far less understood. Chris's project will provide one of the first detailed descriptions of this behaviour once formally published.

This citizen science project is different from many others because participants can't just go out and collect data whenever they want. Instead, dragonfly swarms are something you just sort of happen upon. One thing is for certain, however: dragonfly swarms are something that fascinate people when they see one. Whether a person thinks the swarm is a magical experience, a sign of a coming apocalypse, or something in between, it's something that many people want to learn more about. The best way to get people to participate is to make information about swarms available online and ask for swarm reports from readers. He also posted his project on [SciStarter](#) a few weeks after he started formally collecting data, which boosted participation significantly.

So if you ever see a British dragonfly swarm, we hope you will consider reporting it! The world knows more about dragonfly swarms than ever because people like you share your stories with scientists and recorders worldwide. Together, we can do amazing things, and make a little more sense out of our crazy and amazing world.



# Shenandoah National Park engages citizen scientists in mercury study

Shenandoah National Park in the USA has joined in a nation-wide study of mercury levels in national parks, in an effort to identify threats to natural resources including rivers and water. This national project engages local citizen scientists to collect dragonfly larvae from pre-determined sampling sites to provide information on the spatial distribution of mercury contamination. To date, more than 300 citizen scientists have contributed over 1,800 hours towards the National Park Service-wide study.

Researchers are trying to understand the fundamental drivers of mercury deposition and transport, and the Shenandoah National Park is the ideal place to do this. In this higher elevation, atmospheric mercury can be stored in the soils and potentially be a long-term source of mercury to downstream environments. Here at the top of the watershed, we are the first stop to understanding how changes in atmospheric mercury are going to affect water resources at the park and downstream.

The sampling procedure involves collecting dragonfly larvae from the bottom of rivers or lakes with nets. As dragonflies spend up to five years of their lives in larval form, they have years to eat and accumulate mercury as they grow and develop. Dragonflies are predators that eat a lot of other insects, placing them relatively high in the food chain. For these reasons, dragonfly larvae build up higher levels of mercury than other water-dwelling insects.

Dragonfly larvae are a food source for many types of fish that then accumulate more mercury, and are then in-turn consumed by mammals, birds, and humans, posing an even greater threat to health including human health. Because larvae are much easier to sample than fish, they provide an excellent source of information on the levels of mercury contamination in an area.

Mercury contamination in a remote area often comes from atmospheric deposits from coal-burning power plants. Studying dragonfly larvae is an important first step in understanding the extent of mercury contamination and how it compares to contamination in other national parks.



# Our common Sussex species making the news in Wales

A dragonfly not usually found in west Wales has been spotted at a nature reserve in Ceredigion. A brown hawker dragonfly has appeared at RSPB Ynys-hir, near Machynlleth, where the BBC Springwatch programme was filmed earlier this year. The RSPB said the insect was common in England but rarely appeared as far west as Ceredigion.

The brown hawker has golden brown wings, with yellow stripes across its body. David Anning, site manager at RSPB Ynys-hir, said: "We were really excited to discover this dragonfly at the reserve but it doesn't surprise us. Over the past 10 years we've worked really hard to create the ideal home for dragonflies, forming new ditches and raising water levels. We are proud to see these beautiful creatures making the reserve their home."

If the weather stays mild, the RSPB said the brown hawker would remain at the reserve later this year. And if climate continues to change, it may even take up residence permanently in the future.



# Sussex Garden Ponds

Word on the block has it that Penny Green has built a new garden pond. So I asked her “How big is it?” “I’m not really sure” she said, “but we had 13 people around to help dig it”. 13 people? Having dug my own pond single-handedly, it seemed to me that either the good folk of West Sussex aren’t much into hard labour or we are talking about a seriously large pond. Shortly after, I received a photo of the pond, which is a substantial 6m x 4m. Here is husband, Dave enjoying a cuppa, awaiting the next arrival:



Here’s my 8 ft x 5 ft pond, just for comparison: It will be fascinating to compare results over the coming years.

In its first year, 2002, my pond had attracted 9 species with 8 ovipositing. Although, only 4 of these were proved to emerge over the first 2 years. Last year, a Black-tailed Skimmer visited the garden, bringing the total to 12 species.

Of these, 5 bred and emerged on several occasions, whilst 3 species emerged on just 1 occasion each. Recently, I reviewed the various sightings and came to the conclusion that the species emerging in September 2005 was more likely to be a late emergence Large Red Damselfly than the assumed Common Blue Damselfly. I had as a result reduced the species total to 11.



# Sussex Garden Ponds Continued ....

Remarkably, 2 days ago, a blue damselfly alighted in our kitchen garden. I retrieved my binoculars from the kitchen expecting an Azure and was amazed to see a Common Blue Damselfly:

Yesterday, I thought why not relax by the garden pond rather than chase around the countryside to check out Scarce Chaser emergence and bless my soul, a Banded Demoiselle floated in, alighted on a daisy for half a minute then flew away. Had I not been sitting beside the pond I would doubtless have been totally unaware of this unlikely visitor, which I imagine came from either Glynde Reach or the Ouse several miles away. So now we have 13 species...remarkable.

Today, a male Broad-bodied Chaser arrived at 12.15 and landed on one of the wooden ducks, flying around and returning to its perch several times:



At 1.20pm a female Broad-bodied Chaser arrived on its own and oviposited into the vegetation.... extraordinary. Had this female mated with the male I saw earlier or with another one? Usually the male will guard the female by flying overhead.



So there's your target, Penny. I look forward to hearing of your pond's results. I should point out, however, that should you look like overtaking my total, that I may have to apply a weighting factor based on the larger pond size. Good hunting.

**Images and article by  
John Luck  
1<sup>st</sup> June 2014**

# Slow down, drivers.

## You could save America's rarest dragonfly.

The Hine's emerald dragonfly is the only dragonfly on the USA's federal endangered species list. The insect's largest remaining population lives in Door County, Wisconsin, where sandy beaches and cherry and apple orchards draw tourists from Green Bay and beyond. A 2003 study found that summer tourist drivers kill about 3,300 Hine's emerald dragonflies each year,. No one knows exactly how many Hine's emerald dragonflies are left, but there are around 10,000 in Door County and up to 3,000 in the Chicago region.

Door County has posted two dragonfly warning-signs on roads near critical habitat areas. But can drivers really safely avoid a dragonfly at highway speeds, or even spot one from inside a car? Searching for a better solution, the South Dakota researchers decided to see if dragonfly death rates were linked with speed. Furness, a conservation biologist working with USD professor Daniel Soluk, mounted cameras on a pickup truck and drove the Door County roads in 2012 and 2013, varying her speed from 15 mph (24 km/h) to 55 mph (88 km/h) in increments of 10 mph (16 km/h). The cameras picked up each dragonfly's position before impact. Every time Furness hit a dragonfly, she tried to collect the carcass and verify the kill.

Furness found that at speeds below 35 mph (56 km/h), Hine's emerald dragonflies — and other kinds of dragonflies — survive their tumble over the hood, and fly away to live another day, Faster speeds kill, according to Furness' research. The dragonflies are either killed on impact or they suffer severe shock and fall to the ground, and are run over by a second vehicle.

Furness plans to publish the results of her research so it can serve as a reference for road planners. Her work was partially funded by the Illinois State Toll Highway Authority, which has already altered a bridge to protect the Hine's emerald dragonfly, raising a bridge span on Interstate 355 so the dragonflies can avoid collisions with cars. While there is no speed that will guarantee a kill-free roadway, a 30 mph (48 km/h) limit would mean a much lower probability of deadly collisions

A dragonfly speed limit is not as far-fetched as it sounds, especially because it would be in place for only part of the year. Adult Hine's emeralds emerge in June and die off by August. "It may be easier to say we only need to do it during flight season, and during the day, but we need to make sure people are actually doing it, just like any speed limit," Furness said. Conservationists have already used speed limits and warning signs to protect other endangered species threatened by road crossings, such as Florida's panthers and Key deer, and Hawaii's nēnē birds. The populations of these three species are so low that deaths by car pose a serious hazard to their numbers.

By Becky Oskin, Senior Writer | August 18, 2014 12:43pm ET

# Local News



## 46 Emeralds spotted at Graffham Common

There is great news from West Sussex. Last year we reported that Sussex Wildlife Trust carried out major heathland restoration work, at their newly acquired Graffham Common site, including the clearance of dense areas of rhododendron, the blocking of forestry drains and the creation of seasonal and ephemeral pools for dragonflies.

This year the results of the work have shown themselves in abundance. Although there is still a way to go before the site is restored to its full glory, over 46 Common emerald damselflies were recorded in just one day at the site of the main pond, which was previously lost behind a wall of invasive species. We are looking forward to hearing news about how many dragons and damselflies are enjoying the new wet heath areas too.



## Welcomes, Thank You's & Goodbyes

Many thanks to everyone who contributed to this season's newsletter and to those of you who have uploaded your photos and records to our website.

If you would like to view your dragonfly records online, they are accessible via the National Biodiversity Network Gateway, which will be updated soon with the new 2013 records.



# National News

## Willow emerald damselfly is spreading across the UK!

The Willow Emerald Damselfly is a recent colonist to South East England, but a new site has been discovered away from previously recorded areas. We now think that there are more undiscovered sites to find for this species, so don your detective hats and help us to discover more about the spread of this species.

The Willow Emerald Damselfly (*Chalcolestes viridis*) is one of Britain's new colonist species. It first appeared in East Anglia around 2007, and is now well-established in a areas of South-east England.

Willow Emerald Damselflies fly quite late in the season, with a peak occurring during August-September, though occasionally individuals may be seen even into November in favourable years.

Although broadly similar to other emerald damselflies, from which it can be distinguished by the pale pterostigmata (wing-spots) and characteristic patterning on the sides of the thorax, the Willow Emerald is notable for the female laying eggs into the branches of trees and shrubs overhanging water (many soft-barked species are used, not just willows!). Look carefully at the bark of branches of waterside trees for the characteristic pattern of galls indicating that Willow Emerald oviposition has taken place. The BDS species information page ([www.british-dragonflies.org.uk/species/willow-emerald-damselfly](http://www.british-dragonflies.org.uk/species/willow-emerald-damselfly)) has photos of the gall patterns.



Even when not showing breeding behaviour, both males and females spend much of their time in the trees, and observers therefore need a different search strategy when attempting to find them. Although now well established in east Norfolk, Suffolk, Essex and north Kent, David Chelmick and John Luck found a thriving colony near Redhill in Surrey. This is sufficiently far from other known sites to suggest that the species may be more widespread and that peripheral colonies are being overlooked.

So keep a lookout for the species this autumn. Individuals typically perch on the end of branches (often those that are bare and partially exposed), hanging off at an angle of 45° with their wings half open. Their silhouette is very characteristic when you know what to look for. You can also find new sites when there are no adults about. It will be interesting to see if other 'extra-limital' colonies are discovered this autumn.

**Photo: Female Willow Emerald Damselfly by Adrian Parr**

# Sussex Group Field Trips

## Chithurst by Penny Green

We had a glorious day for our dragonfly field trip to Chithurst Monastery and Hammer Wood on Saturday 12th July with 29 of us in total. Aside from all of the chatting and beautiful serene surroundings we enjoyed seeing 12 species of Odonata, with highlights in the bird and butterfly categories too. First of all we spent some time at a beautiful pond within the monastery grounds, where we recorded good numbers of Azure Damselfly, 2 Emerald Damselfly, 1 Four-spotted Chaser, 1 Common and 1 Ruddy Darter, 1 Large Red Damselfly, 1 Blue-tailed Damselfly and 2 ovipositing female Emperors. Off to a good start!



We then headed up a lovely country lane, and spotted some Beautiful Demoiselles from the bridge over a tributary of the River Rother, magical in the dappled sun. Onwards to a pool near the woods, where Beautiful Demoiselles, Azure Damsels and Blue-tailed Damsels were seen, as was a Silver-washed Fritillary and a nesting Spotted Flycatcher - a rarity to see these days.

Ovipositing Emperor by Shena Maskell

We walked onwards and up through a woodland to a huge lake, where Downy Emerald, Brown Hawker and Red-eyed Damselfly were added to the list, as was a Kingfisher. Then up through the open glades full of Silver-washed Fritillaries where we spotted and deliberated over a dragonfly which ended up being a Southern Hawker - another one for the list, and a fleeting glimpse of a White Admiral. Another good butterfly atlas record. As we walked through a lovely bit of open heath, we enjoyed seeing Dodder in flower and a mystery moth turned out to be the rare Notable A Clay Fanfoot!

## Etchingam by Penny Green

A stiflingly humid day was spent wondering around the ditches of Etchingam on Sunday 20th July in the company of 19 very lovely people. Banded Demoiselles were in abundance, and by far the most numerous species of the day, with a couple of Beautiful Demoiselles here and there to add a bit of variety!

We were treated to several prolonged viewings of probably three different Golden-ringed Dragonflies, offering us plenty of photo opportunities as they perched so nicely for us. A White-legged Damselfly posed beautifully for us, so that we could get a good look at all of its key identification features and a few Blue-tailed Damselflies made brief appearances. A Brown Hawker was seen fleetingly by a few of the group, and in the afternoon a couple of Migrant Hawkers treated us to some aerial acrobatics, not staying still enough for us to admire their markings!

Later on in the afternoon we decided to visit a big scrape on an adjacent bit of land, and we were rewarded with a few additions to the list, including Emperor, Ruddy Darter, Azure Damselfly and Common Blue Damselfly (who posed together for us so that we could compare the difference!) Distant rumbles of thunder heralded going-home time!

## Old Lodge and Moorlands by John Luck

A delightful group of dragonfly-spotters turned out for the Ashdown Forest Field Trip on Saturday 2nd August, probably 25+, but with various toings and froings it is difficult to be precise. The threatened thunder and lightning did not materialise and we were remarkably treated to a rain free day.



Photos by John Luck



The target species - Black Darter, Keeled Skimmer and Small Red Ds - at Old Lodge were soon found in a variety of maturing stages with brief views of hawkers - Brown and Southern - and extended views of a perched Migrant Hawker. Emperors held territory over various ponds. Further darters - Common and Ruddy - were found with several of the former newly-emerged. Further damselflies - Azure, Large Red, Common Blue and Blue-tailed - were seen and several Emerald Ds, which are really relishing the recent hot and humid weather were studied in depth. Also an unexpected sighting of a Banded Demoiselle. Chasers were in short supply apart from a lone Four-spotted and a Broad-bodied, which had perished in one of the boggy pools.

We headed down to Keeches Stream for lunch and awaited the arrival of a Golden-ringed Dragonfly, which duly flew past several times before finally perching to allow everyone to appreciate its stunning markings. Thus 17 species were totted up, not including the perished chaser. Onward to Moorlands where we were greeted by Mark and Lucy Love. Here we enjoyed perfect views of several Brown Hawkers including egg-laying females and a Southern Hawker keeping a low profile on the farther side of one of the ponds. 3 new species were found, all damselflies - White-legged, Red-eyed and Small Red-eyed - to bring our day's total to 20 species. No sighting of a Brilliant Emerald, which had been seen here 2 weeks ago so we wondered if perhaps its flight season had finished. Though more likely it just decided not to appear. As ever, the Loves had laid on a sumptuous fare which was washed down with a well-earned cuppa.....our grateful thanks to them for their continuing generosity.

# Dragonfly Events 2014

## National

### The British Dragonfly Society

The BDS are pleased to announce that the venue of this year's **BDS Annual Meeting**, on Saturday 15th November has now been finalised. They will be holding the meeting at the Wildfowl and Wetlands Trust's London Wetland Centre. This marvellous venue helps to bring the countryside to London, and was voted the UK's Favourite Nature Reserve by the public in the Countryfile Magazine Awards 2012. The London Wetland Centre is situated close to central London, on the banks of the River Thames in Barnes. It is easily accessible by private and public transport, just a 10 minute bus ride from Hammersmith Tube station and close to both Barnes and Barnes Bridge stations.



Visit [www.wwt.org.uk/wetland-centres/london/](http://www.wwt.org.uk/wetland-centres/london/) for more details of the location. The Wildfowl and Wetland Trusts heated, two storey Observatory provides panoramic views across their lake and nature reserve so you can indulge in a spot of bird watching while keeping dry and warm. There are six wildlife hides dotted around the centre. The gallery often has an exhibition of wildlife photographs for you to browse and a short documentary about how the nature reserve was created from four disused pits. We look forward to seeing you there.

# Dragonfly Tales

## The Dragonflies And The Monkeys (a Filipino folktale)

One day, a dragonfly was travelling from the northern island of the Philippines to her home in the South. After many hours she was exhausted, but still had a long way to go. "I'll rest awhile," she decided, and spotted a grove of banyan trees. As she was fanning herself with her wings and catching her breath, she heard a rustling sound beside her. "Who's there?" she asked, and a moment later a monkey stood beside her. "What are you doing?" he asked. "You're trespassing! You'll have to leave right now". Her desire for rest inspired her courage, and she looked up at the monkey and said, "Please, could I rest here? I've been flying so long, my wings won't carry me much farther.

"But the monkey shook his head. He didn't care. "Poor, tired wings!" he said, but his voice was mocking, and he was sneering. "We don't allow weak creatures to stay in our tree," he said. "Go away, now!" and with that, he snapped a twig from the tree and brandished it as if it were a sword. "Don't hurt me," the dragonfly said, but the monkey threw the stick at her. The dragonfly was tired, but dragonflies are quick, and before the stick was out of the monkey's hand, she was flying away.

When at long last she reached home, she went at once to tell the king of the dragonflies the story of the monkeys in the banyan tree. When the dragonfly king heard the story, he was furious. He decided the dragonflies must confront the monkeys, and he sent three of his envoys to speak to the monkey king. The dragonfly envoys flew to the banyan tree and called upon the monkey king. "Your monkeys treated one of our dragonflies cruelly, "Our king asks that you make amends or we will take revenge. "Hearing this, the monkey king laughed. "Revenge, you say?" he howled with laughter. "Tell your king to come back here, and we shall see how much revenge you can take!

The dragonfly envoys flew back to their king and told him what the monkey king had said. The dragonfly king ordered his whole swarm to fly to the monkeys' banyan tree to teach them a lesson. The dragonflies carried no weapons but their wings, and they flew in strict formation. As they approached the banyan tree, they saw an army of monkeys wielding branches and sticks. The dragonfly king turned to his soldiers and commanded them: "Fly to the monkeys and land on their foreheads!" So, as the monkeys began to scatter down their tree, waving their sticks in the air, the dragonflies flew directly at them, landing on the monkeys' foreheads. The monkeys quickly raised their weapons and struck, but the dragonflies were so quick, they flew away, and so the monkeys struck their own foreheads. One by one, the monkeys fell from the tree ... and that is how the dragonflies won their revenge on the monkeys. And that is how all the forest creatures learned humility, respect of others, and to admire delicateness, agility and wit.

Read more here: <http://www.sunherald.com/2014/05/17/5581539/the-dragonflies-and-the-monkeys.html#storylink=cpy>

# Kids Corner

## Who Says Don't Play with Your Food?

Most children are told just to eat their food and not to mess around with it, but sorry parents, we're about to encourage your kids to do exactly the opposite. Some artists have started to make 'food sculpture' a bit of an art form, and as you can see below this includes taking time to create a vegetable version of the winged wonders — dragonflies.

So knock yourselves out kids. Obviously ask mum and dad first if you can use their prize carrots, before turning them into an insect sculpture, but we think you can come up with some novel ideas. So see what you can make with your leftover vegetables and send us a picture if you like :)

Think about all the wonderful dragonfly colours you can re-create using red cabbage leaves, runner beans, potatoes and parsnips, tomatoes and even chillis and peppers. We can't wait to see your pictures.



© Vanessa Dualib / Barcroft Media

# New to Recording Dragonflies?

Here's a few tips to help you get started. A basic dragonfly record has 5 parts to it:

1. Your name and contact details
2. The date you made your sighting
3. The name of the site you were at
4. An OS Grid Reference for the site (try this: <http://www.gridreferencefinder.com>)
5. What you saw

Other information that can be recorded, and is useful to us, includes the type of habitat, the weather, the altitude of the site and breeding behaviour. Please send your records to [pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk)

## First and Last

Ralph Hobbs was quick of the draw, and recorded the first 2014 Odonata on the wing. Unsurprisingly it was a teneral Large Red Damselfly, which he spotted on 2nd April in Hastings.

Jon Wood got the last Odonata record of the year, and this was on 19th November. He spotted two male Common Darter on a ditch in Litlington...and here's the proof:

Both records were entered on iRecord—give it a go! <http://www.brc.ac.uk/irecord>



# Adopting a Waterbody

**It's easy!**

I'm sure that many of you get out and about in the countryside on a regular basis, and that on your way you spot the odd streak of dragonfly colour zooming across your field of vision. Well, if you would like to adopt a local pond, reservoir or stream that you visit regularly and tell us what dragonfly life you see there then it couldn't be easier.

**Just complete and return the form below to Penny Green, Sussex Dragonfly Society, c/o Sussex Wildlife Trust, Woods Mill, Henfield, BN5 9SD.** All returns will be held in our local database so that we can provide you with support on identification. If you're not great at identifying dragonflies, never fear, you can email or send us your pictures and we'll get our experts to identify them for you!

**Name**

**Address**

**Contact Tel No**

**E-Mail**



**Coastal dragonflies - Currently a very understudied area in Sussex**

# Top Ten Things To Do To Keep Dragons Flying In Sussex

1. Report your sightings either at [www.brc.ac.uk/irecord](http://www.brc.ac.uk/irecord), or to the Sussex Biodiversity Records Centre at Woods Mill
2. Take photos of unusual dragonflies that you see and post them on our website
3. Come on our free training days and guided walks with local experts – more pairs of eyes mean we know more about what's happening with our dragonflies
4. Build a pond in your garden
5. Become a member of your local group – No charge, just send your contact details to [pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk) or c/o Penny Green, Sussex Wildlife Trust, Woods Mill, Henfield, BN5 9SD, and we'll keep you up to date with our newsletters.
6. Adopt a waterbody near you and report back to us on its dragon and damselfly fauna
7. Report the first and last times you see individual species in each year
8. Use less water! Simple as it sounds if we use less water there is less pressure on our water resources and therefore on our wetlands that these amazing insects rely on.
9. Use eco products for washing clothes and washing up — they leave less damaging residues in our waste water and so help our winged friends by reducing pollution.
10. Look out for aliens! Not little green men, but plants: Parrotsfeather, Australian swamp stonecrop, Floating Pennywort and Water fern among others. These non-native plants when released into our wetlands can reproduce rapidly and can smother ponds and ditches etc making it difficult for dragonflies and damselflies to breed and to reproduce.



**A perched Ruddy darter (male) © D Sadler**

**If you would like to contribute to the next edition of the newsletter or would like to participate in any of the events listed, please get in touch.**

# Contacts

## Core Group

Chair:	Ben Rainbow — <a href="mailto:ben.rainbow@wealden.gov.uk">ben.rainbow@wealden.gov.uk</a>
Editor & Wetland advisor:	Fran Southgate - <a href="mailto:fransouthgate@sussexwt.org.uk">fransouthgate@sussexwt.org.uk</a>
Sussex BRC:	Penny Green - 01273 497521 - <a href="mailto:pennygreen@sussexwt.org.uk">pennygreen@sussexwt.org.uk</a>
Website:	Victoria Hume — Please contact via Fran Southgate
Press/Publicity:	<b>Vacant position</b>
Pond Conservation Advisors:	Jon Wood - <a href="mailto:jonwood555@hotmail.com">jonwood555@hotmail.com</a> Bev Wadge — <a href="mailto:ponds@sussexwt.org.uk">ponds@sussexwt.org.uk</a>

## Other useful Contacts

Wildcall – Free advice on all wildlife issues. 01273 494777; [WildCall@sussexwt.org.uk](mailto:WildCall@sussexwt.org.uk)  
British Dragonfly Society - [bds@british-dragonflies.org.uk](mailto:bds@british-dragonflies.org.uk)  
Booth Museum - [boothmuseum@brighton-hove.gov.uk](mailto:boothmuseum@brighton-hove.gov.uk). 01273 292777  
Freshwater Habitats Trust (ex Ponds Conservation) — [www.freshwaterhabitats.org.uk/](http://www.freshwaterhabitats.org.uk/)  
Sussex Wildlife Trust — [www.sussexwt.org.uk](http://www.sussexwt.org.uk)  
Sussex Wetlands Project — [www.sussexwildlifetrust.org.uk/livinglandscape/living\\_wetlands](http://www.sussexwildlifetrust.org.uk/livinglandscape/living_wetlands)  
National Insect Week — [www.nationalinsectweek.co.uk](http://www.nationalinsectweek.co.uk)  
British Dragonfly Society Shop — [www.british-dragonflies.org.uk/content/bds-shop](http://www.british-dragonflies.org.uk/content/bds-shop)

# Donations

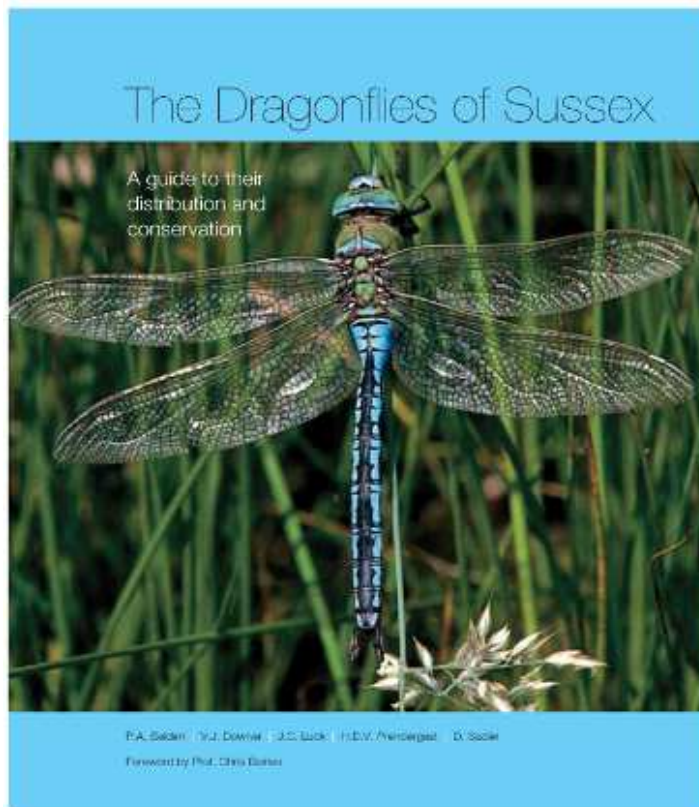
The Sussex Dragonfly Society is run exclusively with donations and proceeds from the sale of the Dragonflies of Sussex book.

If you would like to make a donation towards dragonfly work and restoring wetlands for dragonflies then please write a cheque made out to British Dragonfly Society (Sussex Group), and send it to Sussex Wetland Landscapes Project, c/o Sussex Wildlife Trust, Woods Mill, Henfield, BN5 9SD. All donations will be reserved exclusively for dragonfly and damselfly habitat enhancement work.

# Useful Publications

- The leaflet 'Dragonflies and Damselflies in your garden' is available as a pdf file at :- [www.british-dragonflies.org.uk/sites/british-dragonflies.org.uk/files/images/GardenDragonflies\\_0.pdf](http://www.british-dragonflies.org.uk/sites/british-dragonflies.org.uk/files/images/GardenDragonflies_0.pdf)
- Field Guide to the Dragonflies & Damselflies of Great Britain & Ireland. S Brooks & R Lewington.
- Guide to the Dragonflies and Damselflies of Britain. Field Studies Council
- Dragonflies: New Naturalist. PS Corbet. Collins
- How to encourage dragonflies and damselflies on your land — [www.sussexotters.org/wildlife/dragonflies.htm](http://www.sussexotters.org/wildlife/dragonflies.htm)
- "British Dragonflies" 2nd edition. D Smallshire and A Swash.

# The Essential Garden Companion & Guide for Countryside Explorations **THE DRAGONFLIES OF SUSSEX**



The first ever published book on Sussex Dragonflies.  
by Phil Belden, Vic Downer, John Luck, Hew Prendergast & Dave Sadler.

The indispensable guide to these aerobatic, highly colourful and beautiful insects.  
With detailed distribution maps and notes on status, habitat and conservation, , etc.

Available from Sussex Wildlife Trust, Woods Mill, Henfield, Sussex BN5 9SD. (01273) 492630, or from good book shops (ISBN 0-9525549-1-7)

**NOW JUST £5 plus post & packaging**  
**Payable to 'Sussex Wildlife Trust' c/o Fran Southgate**  
Proceeds go to dragonfly and wetland conservation

*Generously sponsored by: Environment Agency, English Nature, Southern Water, East Sussex County Council, West Sussex County Council, Brighton & Hove City Council, Chichester District Council, Horsham District Council, Wakehurst Place, Profile Security, Temple Environmental Consultants, The Wetland Trust, Gravetye Manor, Harveys Brewery.*

## Sussex Dragonfly Society Newsletter