

# British Dragonfly Society Sussex Group

## Autumn Newsletter 2011

No 27



### HOLD THE FRONT PAGE!

### New species of Damselfly found in Sussex - WOW!

Choosing an item to grip our esteemed readers attention from the outset is definitely a challenge on occasions, particularly when its been such an appalling year overall for dragonflies. So imagine my surprise and pleasure when I was informed that a local student has found a new species of damselfly. That's not something I was expecting to write this year. So here is a sneak, preview of what it looks like .....



Corey Cannon

# First record of Southern Emerald Damselfly (*Lestes barbarus*) in Sussex

by **Corey Cannon**

I was conducting a survey of an SSSI in East Sussex as part of an MSc (Biodiversity Survey, University of Sussex). This entailed surveying species from a number of taxonomic groups. I must admit that I was most looking forward to surveying the Odonata; I find this group truly fascinating. When it comes to identifying species I am still a relative novice and for that reason I thought it was best to net any individual that I was not 100% sure about, and looking back I am really glad I did that. A relatively small but good patch of habitat with wet areas dominated by rushes surrounded the pond on this site and so much of my efforts were concentrated in this area. After several days of surveying the habitat I had a relatively short list of species, the Blue-tailed and Azure damselfly were abundant and on one occasion I was lucky enough to get a glimpse of a Banded Demoiselle, other than these it appeared that there was little else to be found.



The morning of my exciting discovery (August 4<sup>th</sup>, 2011) I was going to start the day off by doing a bird survey, however the weather conditions for surveying Odonata were perfect and so I thought I would just have a quick nip around the pond to see if I could spot anything new. Creeping around the pond with my net in one hand and a small stick in the other it was unsurprising that I was getting

some very strange looks from passersby, at one point a lady even stopped to ask me if I had lost something and did I need help finding it. About 20 minutes into my search, to my surprise and excitement, I spotted something very different looking indeed. I went in for the sweep and lucky enough I caught the little beastie first go. I headed for the nearby bench to get a better look. I managed to get him out of the net and under a plastic cup; however I was still unable to get a clear look and the photo I was after. Quickly scanning my book I thought “how exciting, I have found an Emerald Damselfly”, not realising which species I had found. I decided to lift up the cup to get a photo and thought “if he flies away so be it”, at the time I did not realise the significance of my find. To my delight he was happy to pose for all the photos I wanted to take, at one point he even helpfully

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climbed onto my finger for me to get some side shots. It was hard to get a good look at the photos in the bright light and so it wasn't until later that day, when I got home, that I had a chance to have look at the photos in detail. It was only then that I realised what I had found, a Southern Emerald Damselfly. Excitedly I went to inform my lecturer, who at first told me that I must be mistaken; when I showed him the photos he changed his tune pretty quickly. They clearly showed the bi-coloured pterostigma which is diagnostic of this species, this coupled with the Emerald's characteristic habit of holding the wings well out from the body when at rest were enough to get confirmation from John Luck and David Chelmick. I was absolutely thrilled to hear that I was the first to observe this species occurring in Sussex; as you can imagine I was the envy of all my MSc class mates.



**Corey Cannon**

This species is a migrant from Northern Europe, first observed in Norfolk in 2002, since then only having been recorded at about five other locations. Most records of this species have been from coastal areas, although some more recent records have shown this species to be found further inland, as on this occasion. Adrian Parr confirmed this to be a nice mature male and he suggested that this individual was most probably a fresh migrant. How he ended up where he did is still a bit of a mystery; David suggested that he may have hitched a ride on the train from Kent. Following the first sighting, we tried to identify if there was any evidence of breeding. David and I returned to the pond on a number of occasions but unfortunately we never managed to spot him again. It appears that this individual was just passing by and I was lucky enough to have been in the right place at the right time. This is truly beginner's luck at its best.



**Corey Cannon**

# Vagrant emperors tease us by buzzing around the Sussex border!

**By Graeme Lyons**

I played a dangerous game today (April 25th) and decided not to twitch the **Vagrant Emperor** *Hemianax ephippiger* dragonflies at Dungeness as I had better things to do. However, after hours of indecision I changed my mind and decided I would go Vagrant Emperor chasing after all, and after a late start I arrived at Dungeness at a very casual 1.00 pm.

Fortunately for me, my inertia and indecision paid off as I walked straight up to a male and avoided a long wait! I saw one male for perhaps no more than ten minutes and it was then seen to fly off, over a field and out of sight for the rest of the day. I have to admit I knew very little about this insect before today but the BDS website states it's a long distance migrant coming from sub-Saharan Africa and the Middle East. There were as many as three on site that day and there has been an influx in France recently also.

I saw Lesser Emperor at Dungeness in 2001 and apart from the time of year, it is very similar to look at, so had I not known better I would have thought it was that to start with. Anyway, I myself did not manage to capture any images of this magnificent migrant but thankfully, another local dragonfly spotter, Jake Everitt did and he has kindly provided some of his images for you below. For those of you who are keen spotters I would thoroughly recommend that you pay a visit to Dungeness in spring next year and see what the next in-migration of dragonflies brings. Who knows, if you are lucky one might even stray over the border into Sussex!



Vagrant Emperor pictures © J Everitt



# 2010 Record Review

By Penny Green

Scientific Name:	Vernacular Name:	Record
Odonata	Dragonfly/Damselfly sp.	151
Zygoptera	Damselfly sp.	8
Calopteryx virgo	Beautiful Demoiselle	108
Calopteryx splendens	Banded Demoiselle	88
Lestes sponsa	Emerald Damselfly	10
Platycnemis pennipes	White-legged Damselfly	67
Pyrrhosoma nymphula	Large Red Damselfly	150
Erythromma najas	Red-eyed Damselfly	62
Erythromma viridulum	Small Red-eyed Damselfly	12
Coenagrion puella	Azure Damselfly	175
Coenagrion pulchellum	Variable Damselfly	3
Enallagma cyathigerum	Common Blue Damselfly	78
Ischnura elegans	Blue-tailed Damselfly	132
Ceriagrion tenellum	Small Red Damselfly	6
Anisoptera	Dragonfly sp.	3
Aeshna mixta	Migrant Hawker	91
Aeshna cyanea	Southern Hawker	72
Aeshna grandis	Brown Hawker	59
Anax imperator	Emperor Dragonfly	97
Brachytron pratense	Hairy Dragonfly	60
Gomphus vulgatissimus	Club-tailed Dragonfly	4
Cordulegaster boltonii	Golden-ringed Dragonfly	27
Corduliidae	Emerald Dragonfly sp.	1
Cordulia aenea	Downy Emerald	29
Somatochlora metallica	Brilliant Emerald	31
Libellula quadrimaculata	Four-spotted Chaser	37
Libellula fulva	Scarce Chaser	179
Libellula depressa	Broad-bodied Chaser	116
Orthetrum cancellatum	Black-tailed Skimmer	47
Orthetrum coerulescens	Keeled Skimmer	8
Sympetrum striolatum	Common Darter	114
Sympetrum danae	Black Darter	5
Sympetrum sanguineum	Ruddy Darter	48
Sympetrum	Darter sp.	10



All dragonfly records that have been sent in for 2010 are now in the main database of the Sussex Biodiversity Record Centre. It takes a while for them to filter through each year - the records have to be extracted by you the recorders from your notebooks, put in to spreadsheets and emailed in to us. We then need to import the records in to our 'Recorder' database where we keep all species data for Sussex, which now amounts to over 3,200,000 records, of which 65,344 are dragonfly and damselfly records! Many thanks to all of you who have sent in your records, they're very much appreciated.

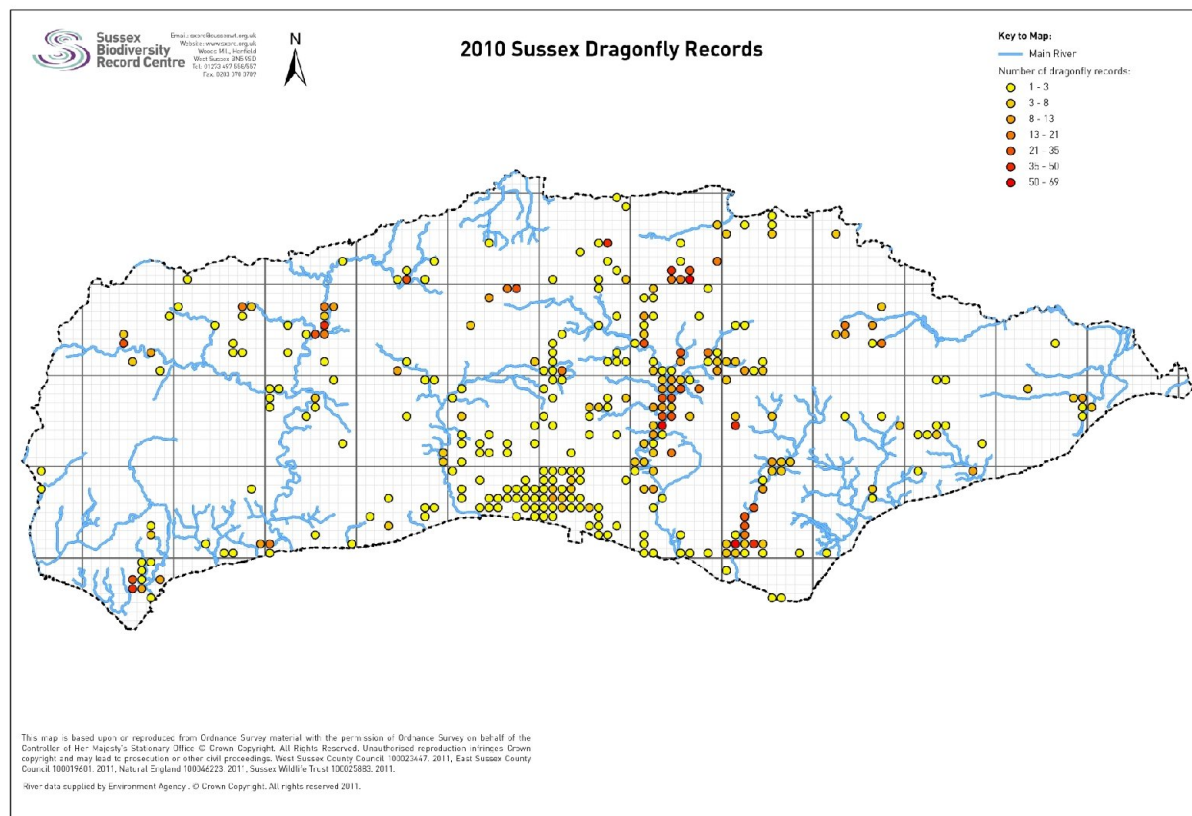
Now the records are all in for 2010, any records of the rarer Sussex species will be presented to the BDS Sussex Group Rarities Committee which is a necessary task to ensure that the high quality of Odonata data continues for Sussex. Once the rarities have been accepted the data then gets sent off to the Dragonfly Recording Network, which is a national system led by the British Dragonfly Society for collating and managing dragonfly records. Subsequently the records will appear on the NBN Gateway, so you can see your dots on the map. Check out <http://data.nbn.org.uk/> and have a go!

Here are the records from 2010, see adjacent table (please note that the 'record count' column denotes the number of records not the number of individuals recorded). There are 2002 records in total and as you can see from the table the most recorded species is Scarce Chaser; this is thanks to targeted efforts by Scarce Chaser champion John Luck and his dedicated team.

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You'll notice a lot of records under the generic name of 'Odonata', 'Dragonfly' and 'Damselfly' this is generally not very useful data but it was collected in a very worthwhile exercise. These records were gleaned at public events such as Springwatch, when we asked what animals parents and their children saw in their gardens. This was helped along with activities to interest children such as making dragonfly badges and masks!

You can see from the map that the records are pretty well distributed across Sussex, we will publish in the spring issue a map showing all dragonfly records so we can see what areas have not been recorded before, so you know where to target in the 2012 season. The Ouse and Cuckmere were well covered, and the dots that cover Brighton are the records we collected at Springwatch. Other hotspots include Pagham Harbour, Ashdown Forest and the upper reaches of the Arun around the Stopham Bridge area. There will be data coming in from Rye Harbour soon which will no doubt have plenty of dragonfly records in too.

If you haven't yet sent in your records for 2010, it's not too late!  
Please email me on [pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk)

Also, we're now looking at collecting your 2011 records over the next two months, so please start entering your records in to a spreadsheet or ideally directly in to [www.livingrecord.net](http://www.livingrecord.net) as soon as you can!

Thank you for all your recording effort and for sending in your records!



# Ultraviolet Dragonflies

During 2008-2009, a landowner known to us as 'Moorhen' carried out a survey of the wildlife at their site which they have been managing as a sustainable farm and wildlife reserve. The survey that they carried out was however, a survey with a bit of a difference. They walked around the site monitoring how all the wildlife would appear if humans could see in UV light. Now why on earth would they do this you ask? The logic behind the survey was that many insects and other creatures can see only ultraviolet light, and these foresighted landowners were curious to see how the world looked from a different perspective. The results of their survey are fascinating and can be found on the web at <http://www.moorhen.me.uk/>.

Their report includes all the technically useful images they recorded - showing the 'failures' as well as the 'successes'. In fact a large number of plants and insects turned out to look very dull in UV - i.e. mostly 'black', just showing reflection from shiny surfaces, or a mimic of the general colouration. No animals (including insects) were knowingly harmed during the survey. Despite some of them looking dead, they have simply been chilled to about 4C to render them torpid. Those where even this was insufficient to quiet them were either photographed 'on the run' or held under a net (very obvious in a few images). Everything was released at or near their point of capture. If you are interested in the methods used to obtain the images or want to do some detailed study on them your should read the details at [Photographic & Processing Details](#)

UV Celendine image copyright Moorhen



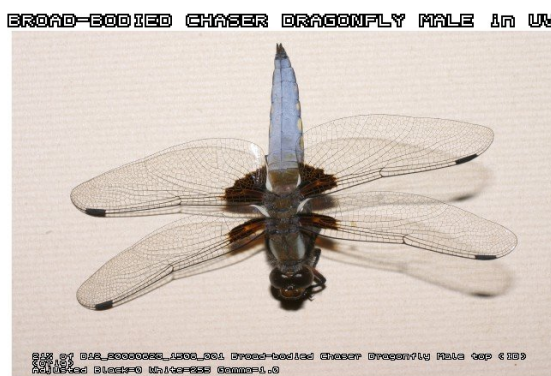
Part of the Moorhen survey was carried out on the all important dragonfly populations that they found on their land, and they have been kind enough to let us use their images to show you the results. Dragonflies are particularly interesting because, apart from the Broad-bodied Chaser male, the top of these normally visually spectacular insects is rather dull in UV. However, in contrast, the rarely viewed underside of some dragonflies is sometimes distinctly marked. Dragonflies are basically visual creatures without pheromones (chemical signals) so visual recognition is important. Some dragonflies are known to have vision in the UV part of the spectrum.

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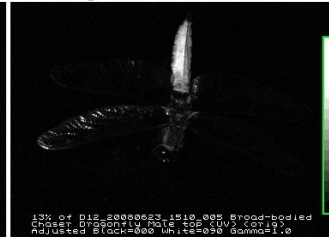
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You can see clearly from the images here that there is a notable difference between the ultra-violet properties of the Broad-bodied Chaser (Right), and many other dragonflies such as the Hairy dragonfly (below). Whether this is an expression of a little known genetic advantage of the Broad-bodied Chaser, which helps it attract other mates and helps it within its everyday lifecycle, or it is in fact a sign of a genetic disadvantage which will prejudice the Broad-bodied Chaser to greater predation by UV sensing birds is unknown. Its absolutely fascinating to be able to see things through 'different eyes' however and gives us a great deal more to think about in terms of the conservation and monitoring of such complex species. Different versions of some of the dragonfly images are included in an as yet unpublished research paper which we will hopefully hear more about in the near future.

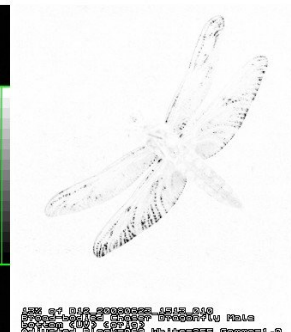
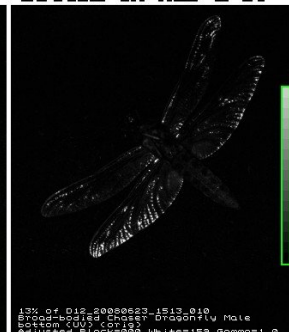
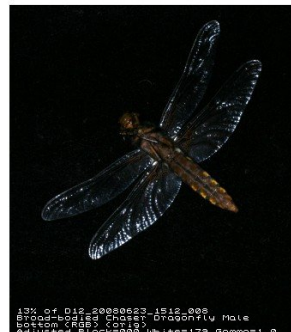
Our sincere thanks again to Moorhen for letting us use their images. Please respect the copyright of the authors and researchers and do not reproduce the images in this article, and if you have any theories on the usefulness of UV in dragonflies, let us know!



Top in RGB & UV



Bottom in RGB & UV



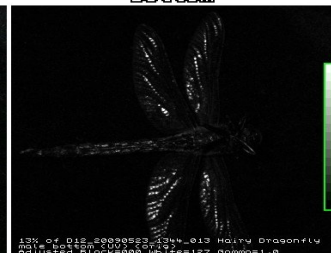
HAIRY DRAGONFLY MALE in UV



Top



Bottom





# A drain on water resources

One of the main reasons that Sussex lost vast areas of its wetland habitats and species, was a post-war drive to open up more land for agricultural and urban development. As part of this process, huge areas of land had sub-surface and surface land drains installed, the majority of which still serve to drain water quickly and efficiently from fields, farms, forests and towns. This is also one of the main reasons that we now experience seasonal 'flash flooding' on our rivers, which are increasingly forced to cope with high volumes of drainage water being flushed into them over short spaces of time, whilst at the same time having most of the natural floodwater storage capacity of river floodplains 'cut off' by embankments and artificial structures.

In the late 1970's, Sussex Wildlife Trust played a fundamental role in preventing the Amberley marshes from being pump drained. This was a major achievement at the time, and the sites' continued protection as a site of international importance for a wide variety of species, holds testament to the fact that its protection from drainage was well founded.



**A wet ditch on a Sussex Nature Reserve.  
Wetland or Drainage?**



**Volunteers removing sub-surface  
land drains which were discov-  
ered at one of the Wildlife  
Trusts Nature Reserves**

As the Sussex Wetlands Officer, I have a passion for wetlands, and an aversion to water drainage! I find it fascinating that we have vast areas of 'wetland' which we protect as prime habitat, which is intersected with man-made land drains and ditches. Often these ditches are the only remaining wetland feature of what should naturally be marshland, fen and reedbed. Although these areas are now extremely important for the remnants of wetland wildlife they protect, including some stunning populations of dragonflies and damselflies, the fact remains that these habitats are mere fragments of what should be immense and vibrant wetland marshes that we could aspire to restore.

Recently I visited a local land manager in West Sussex and was reminded of how simple it could be to restore vast areas of our damaged wetlands. Several years ago, the field in the picture (right) was a bare, open grassland. The site manager blocked one of the drainage ditches which frequently run along the edge of fields in river floodplains and as a result, an entire wetland has formed. The image speaks for itself and there have been sightings of everything from Marsh harriers to Harvest mice in this newly 'un-drained' wetland which is now teeming with wildlife. I'm looking forward to seeing if I can help anyone else in Sussex reverse the drainage in their wetland too.

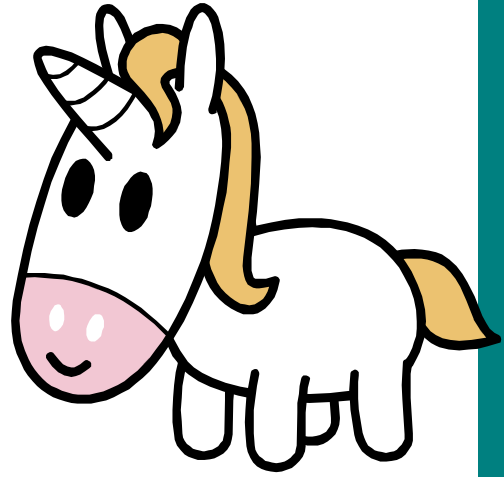


# Urban Dragonflies

## Are They As Mythical As The Unicorn?

It seems we have a problem of rural snobbery amongst our Sussex dragonflies and damselflies. Apparently they simply don't want to live in our towns and cities!! Perhaps the towns are just too busy and noisy for them? Or perhaps we simply don't look to see if there are any there?

One of the inherent issues we have with trying to keep track of some of our rare and interesting wildlife in Sussex is that the records we receive are only as good as the people out there recording them. We have major clusters of species records around the home addresses of most of our top ecologists in Sussex, mostly because they just can't help themselves but look for rare things when they are out and about on a weekend stroll. At the same time, we may only get six hedgehog records sent to us in a year, because everyone thinks they are too common to bother recording. When suddenly we notice that a species is not nearly as common as it used to be (like the water vole, or the hedgehog) then we have to try and hurriedly survey for them before they become extinct.



It's more than likely that this is the case for a number of our dragonfly and damselfly species in Sussex. The Scarce Chaser is a classic example. Were they actually incredibly scarce until recently, or was it just that the people chasing the Scarce Chasers were a rarity themselves?

One thing we've noticed for sure is that there are very few records of dragonflies and damselflies being reported for urban areas. Despite this, urban green networks may be some of the most important we have for helping dragonflies and other species migrate through to other areas of habitat around our urban centres. There are 15 million gardens in the UK and they are estimated to cover more than the area of all the National Nature Reserves in the UK. Private gardens are thought to comprise 3% of the land area of England and Wales; London alone is made up of around 20% garden land.

Each garden on its own may be small, but together they form a patchwork of valuable habitats for wildlife. If most of those gardens have a pond in them (or even just a bucket or a water butt) then suddenly they become havens for dragonflies and other wetland species too. Managed sympathetically, this enormous resource can make a real impact on nature conservation, supporting insects, birds and mammals.

In Sheffield, the *Natural Environment Research Council* funded a fantastic project which encouraged lots of urban residents to start taking a closer look at the importance of their gardens for wildlife. You can view their reports at [www.bugs.group.shef.ac.uk/BUGS2/bugs2-index.html](http://www.bugs.group.shef.ac.uk/BUGS2/bugs2-index.html).

Or if you are simply interested in encouraging dragonflies into your garden, take a look at the Pond Conservation website for a few hints. [www.pondconservation.org.uk](http://www.pondconservation.org.uk), kit yourself out with the Field Studies Council Guide to dragonflies which are brilliant for the beginner ([www.field-studies-council.org/publications/foldout.aspx](http://www.field-studies-council.org/publications/foldout.aspx)), or attend one of our free training events next year and let us know just how much dragonflies like your side of town!!

# Which dragonflies make the best fast food snacks for falcons?

**A. Clarke, P.A. Prince & R. Clarke**

**Bird Study Volume 43, Issue 3, 1996 ; Pages 300-304**

In 1996, researchers decided to find out more about the nutritional values of different dragonflies. Dragonflies and damselflies are important prey for many small falcons, and the recent expansion of the breeding range of the Hobby into eastern England has been associated with a possible increased availability of dragonfly prey to juveniles.

Researchers measured the energy content and elemental composition of a range of common British dragonflies to see whether there were different nutritional values between species and to see if one species makes a more nutritious snack than another.

The results are fascinating and show that the carbon and nitrogen contents of dragonflies were typical of aquatic invertebrates but that they did not vary with dragonfly size. However, ash content was significantly reduced in larger species. The mean energy content of dragonfly tissue was 24.6 kJ/g (dry mass) and showed no significant variation between species, but the energy content of an individual dragonfly ranged from 0.8 to 9.4 kJ for the species examined in this study. Data on the energy requirements of free-living falcons suggest that a juvenile Hobby in late summer could meet its daily energy requirement by capturing between 75 and 90 Migrant Hawker or 200 to 250 Common Darter dragonflies on the wing each day. Now that's what I call fast food!!

If you want to read the whole article go to  
[www.tandfonline.com/doi/abs/10.1080/00063659609461022](http://www.tandfonline.com/doi/abs/10.1080/00063659609461022)





# How to win over ladies and make an impression in the dragonfly world!

**By Len Tucknott**

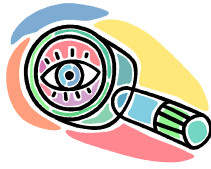
On a visit to photograph dragonflies, I just happened to be admiring a male Broad-bodied Chaser by a pond when a female arrived on the scene. After three attempts by the male to win her favours, his approaches became more and more aggressive.

Imagine my surprise when as a last resort, he grabbed her and stuck her to what I thought at first glance was a cob web! However, on closer inspection I was amazed to find that he had actually impaled her by her wings on the nearby stem of a rush, basically incapacitating her and leaving her exposed to either himself or to any passing predator!

I must admit to never having seen anything like it. Anyway, once the said male had departed, I gently released her, expecting her to be a little stunned and to give me a chance of some close up photos. She didn't seem to be overly perturbed however and she flew down to the water and laid eggs in three spots round the pond. On the way home I had the wonderful thought that in two years time I may well get the chance to take pictures of her young!



**A somewhat bemused (I expect) female Broad-bodied Chaser left 'hanging around' by a male!**  
© L Tucknott



# EYE — D Corner No 9

## Identifying Club-tailed Dragonflies

### Distribution

The Club-tailed dragonfly (*Gomphus vulgatissimus*), also known as the Common Club-tail, is anything but common in the UK and is a very special dragonfly for Sussex. Although it is the most widespread Gomphid species in Europe and can be found widely across Scandinavia, Russia, France and Italy, the species is listed as nationally vulnerable in the UK and it is found in less than 100 10km-squares in Britain

The River Dee supports the most northerly population, and otherwise it is found on the mature stages of seven river systems and their tributaries; five of these rise in the Welsh Uplands (the Dee, Severn, Wye, Tywi and Teifi) and two in Southern England (Thames and Arun). It is therefore a very localised species but in suitable habitats it can be found in very large numbers.



**Mature Club-tailed dragonfly. Note the bulbous abdomen © D Sadler**

### Appearance

The Club-tail is a medium-sized dragonfly with a fairly distinctive shape and colour. Males and females are both have yellow bodies with strong black and yellow markings along the abdomen. As the name suggests however, it is the bulbous 'Club-tailed' appearance of the end of their abdomen which makes them distinct from other dragonflies.

Unlike most dragonflies the eyes are separate and do not meet at the top of the head, which aids identification. In mature adults the eyes are dull green. As the male matures most of the yellow markings turn green although abdominal segments 7-9 remain bright yellow. The shape of the hind wing differs between the male and female and can be used to help distinguish the sex of insects even while they are immature.

Larvae of the Common Club-tail are unique, and unlike other British species have short bulbous antennae. The shape of the exuvial case is diagnostic and easy to identify with the head appearing triangular due to the way the antennae always form an apex at the front of the head



**Adult Female Club-tailed dragonfly © D Sadler**



## Continued . . . . .

### Behaviour

This dragonfly is elusive as an adult, but can be seen most frequently during emergence or as a teneral insect. Once it has settled in the vegetation or upon stones, its cryptic colouration makes it difficult to observe.

Common Club-tails spend most of their adult life away from water perching on the ground, on bushes and in treetops. They are often found in woodland and use the tree canopy more than most species. They are elusive insects and consequently knowledge about their terrestrial requirements is limited.

Mature males are territorial, preferring to fly low over open water rather than along the shoreline, to defend territories or to hunt. Copulation is rarely seen, but has been witnessed some distance from water. It can be seen in woodland glades, where males will display over bracken to encourage females to fly down to mate. Females oviposit alone, favouring quieter stretches in an attempt to avoid male attention. They fly low over the water, dipping their abdomen below the surface several times before disappearing.

It is likely that their preference for slow flowing water prevents them from being washed too far downstream and they appear reluctant to wander, except at low current speeds .



**Older male Club-tailed dragonfly showing greener colouring © D Sadler**



**Emerging Club-tailed dragonfly © D Sadler**

### Emergence and flight period

They are an early species and are most likely to be seen from May to the end of June/early July. They have a tightly synchronised emergence triggered by increasing day length and rising water temperature in May and June. The larvae wait for the sun to come up before leaving the water and may travel up to 20m or more to find a suitable emergence site.



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### Habitat

In Britain the Common Club-tail is a riverine species typically associated with moderate to slow flowing water. It breeds in unpolluted, meandering rivers, which have a depositional nature, so more naturalised river channels are favoured. Silty substrates are favoured over stretches with rock beds as the larvae are burrowers. Inhabited reaches are typically adjacent to woodland rather than more open habitats, as woodland provides cover for the adults.

The larvae of the Common Club-tail live within silt and mud on the riverbed for 3 to 5 years, and research shows that they prefer the inside bends of meanders, with clumps of emergent vegetation. The de-silting of river channels can therefore be extremely detrimental to their life cycle.

### Confusion with other species

The Club-tailed dragonfly is unlikely to be confused with any other species, but to the untrained eye it is possible for it to be mistaken for the Golden-ringed Dragonfly *Cordulegaster boltonii*, or the Black-tailed Skimmer *Orthetrum cancellatum*.



Golden-Ringed dragonfly © J Luck

The Club-tailed is much smaller than the Golden-ringed however, and the pattern of pale markings is very different. The Golden-ringed is found largely on heathy areas such as Ash-down Forest and so it can often be separated from other species by its habitat use alone.

A complete beginner may suffer some confusion between Common Club-tails and the females of some dragonflies including Hawkers and Darters which also have yellow colouring with dark markings but generally the females markings are nowhere near as distinctive as those of the Club-tail.



Black-tailed Skimmer © D Mitchell

Of course the best thing to do if you're not sure of your identification is to try and send us a photo so we can get our team of resident experts to identify the species for you. Otherwise, good luck in your search for these beautiful and unusual insects and do let us know if you find any of this local treasure.

## Continued . . . . .

As with many wetland species, and particularly the more specialist species such as the Common Club-tail, there are a number of threats to their survival. These threats include :-

- Water pollution
- River maintenance (Excessive dredging and vegetation removal)
- Sediment deposition
- River Improvement schemes
- Recreational use of rivers
- Adverse weather
- Habitat loss
- Habitat disturbance
- Changing hydrology of rivers
- Predation



**Separated eyes on the top of the Club-Tailed dragonflies head is a handy identification feature © D Sadler**

**Club-tailed dragonfly teneral female. The shape of the hind wings differs between immature males and females © D Sadler**





# National News



**13<sup>th</sup> June 2011**

## **British Dragonfly Society appoints its first Chief Executive**

Celebrating the start of National Dragonfly Week (June 11<sup>th</sup>-19<sup>th</sup>), the British Dragonfly Society (BDS) also announced the appointment of its first Chief Executive, Gary Roberts.

BDS President, Dr Pam Taylor, said "This is a major step forward for our society and we hope the new appointment will help to raise awareness of dragonflies and their fragile wetland habitats at a time when climate change is really beginning to affect their distribution. Although some dragonflies are doing well and expanding their range northwards, many of our rarer dragonflies are under threat from habitat change. It is an important time to think about conserving wildlife on a landscape scale. We need to take action to preserve precious wetland areas and the species they support."

BDS began in 1983 as a group of like-minded enthusiasts who wished to promote the conservation and study of these beautiful flying jewels. Since that time the BDS has grown to be the largest dragonfly society in the world with over 1,500 members.

BDS appointed its first Conservation Officer in 2001 and a second member of staff in 2005, but most BDS activities are still run by dedicated volunteers. The recent success of the society as a focus for dragonfly information and advice, coupled with its increasing workload conserving vulnerable species, has necessitated the creation of this new Chief Executive role.

Gary Roberts (44) joins the BDS from Coed Cadw (Woodland Trust in Wales). He has always had a passion for the natural world, particularly insects, and began his working career restoring a chalk quarry to a nature reserve. Through his own environmental communications company and as an employee, Gary has worked with a diverse variety of other wildlife organisations including Butterfly Conservation, RSPB and Quercus (Portugal).



On being appointed as BDS Chief Executive he said "I am delighted to be the first Chief Executive for the BDS. Dragonflies and damselflies are amongst the most beautiful, dynamic and ancient of our insect fauna. They are excellent natural barometers of the health of our wetland environment. They are also symbols of courage and luck. I, for one, certainly hope so."



"Key challenges for me as CE are to increase membership and funds, and implement a communications and marketing plan. The BDS is keen to work with a variety of organisations, companies and individuals to ensure the conservation of these spectacular insects and their wetland habitats."






## British Dragonfly Society Launches New Website

We'd thoroughly recommend that you take a look. Its much more user friendly than the last one and has all sorts of useful information and stunning images on it.




Home About Us Dragonflies Conservation & Research Recording Projects News & Events Membership & Shop Search this Site Go

### Latest News



The 28th annual Members' Day of the British Dragonfly Society will be held on 22nd October 2011 at the Old Refectory, Hannah's at Seale-Hayne, Newton Abbot, Devon. Join us for an interesting programme of talks and presentations.

[read more...](#)




The BDS have booked a stand at WildlifeXpo to be held at Alexandra Palace, London on 14th and 15th October 2011. This is the UK's most comprehensive

### Dragonflies

Welcome to the new website of the British Dragonfly Society. The site has lots of new features including a completely new online recording system and online shop. If you want to join the BDS or make a donation you can do that here. There is a new section on the biology and ecology of dragonflies plus details of the best places to see them.

[» Read more](#)

### Star of the Month



The Migrant Hawker *Aeshna mixta* is a medium sized late summer dragonfly

often seen flying in large numbers in tree tops and hedgerows. Mature males patrol low down along the edges of slow flowing waters hovering and looking for ovipositing females. They sometimes occur as an autumn migrant.

### How You Can Help

The BDS needs your support. Although many species of dragonfly are doing well almost a third of our species are in decline. We need volunteers to record

## Wildlife Extra Photography competition

The UK has some of the world's best wildlife, but not enough people realise it. The Wildlife Extra Photography competition is an annual wildlife photography competition set up to promote the wildlife of the UK. Submit your best shots of the UK's wildlife for a chance to win some decent prizes for the best in each category, whilst earning a donation of £300 to a UK wildlife charity to be nominated by the winner.

The BDS are proud to be sponsoring the Wildlife Extra Photography competition.

For a chance to win a signed copy of Britain's Dragonflies and a year's membership for the BDS click on the link below: <http://www.wildlifeextra.com/go/news/uk-wildlife-photography011.html>

**Photo (Right)** - The winner of the 2010 competition was Three Deer glade by Mark Sims



# Local News



## Local experts where are you?

Every year we arrange a series of engaging and educational walks and talks about our favourite subject (dragonflies and damselflies of course!) for your delectation! We know that there are more local experts out there than we currently are in contact with, and we would love to hear from you if you would like to arrange a guided walk or another event next year. Go on, don't be shy, I'm sure you are all much more brilliant than you give yourselves credit for :)



## WANTED — Treasurer for Dragonflies

Since our lovely treasurer departed we have been left with a wee gap in our committee and a bank account with no one to manage it. So if you fancy a dabble in the world of dragonfly finance then let us know. Its really not a very onerous job, our income is small and at most we receive a few small amounts of cash annually for our dragonfly books, with very little expenditure going out. We have around 3 committee meetings per year, all of which involve biscuits and cups of tea and are very relaxed. If you think you might fit the bill then please contact Penny Green (details at the end of the newsletter)



## New Dragonflies for Bookworms

For those of you who can't get enough of the winged wonders, here is a link to a sample chapter from the new Royal Entomological Society book on Dragonflies which may be of interest:

[http://media.nhbs.com/book\\_pdfs/RES-Insects\\_chapter8.pdf](http://media.nhbs.com/book_pdfs/RES-Insects_chapter8.pdf)



# Dragonfly Events

## Springwatch

Although slightly plagued by bad weather this year, Springwatch at Stanmer Park, Brighton was as ever an incredibly popular event. Local members of the public were treated to some spectacular live show events, hearty local produce, and close contact with people from all sorts of local groups and organisations.



The Sussex Dragonfly Society were pleased to be there on the day and our volunteers spent the day helping young and old alike to get acquainted with our flying friends.





# Field Trips

## Lewes Brooks Field Trip, 3<sup>rd</sup> July 2011

An embarrassing lack of communication in the BDS meant we had a clash of two dragonfly field trips on the same day in Sussex, one organised through the national office, the other our humble little Sussex Group. We'll try not to let that happen again!

One of the best and worst places for dragonflies is our expansive wetland; here the ditches can be a source of species richness, but the open exposed habitat makes even the slightest adverse weather conditions a real obstacle. A light breeze in any other more sheltered habitat can be a serious wind in these vast flat expanses, keeping dragonflies at bay.

An intrepid bunch met at Southease railway station, where some of us practised sustainable transport, arriving by train (and cheaper than the car on off-peak Sunday too). The weather was pretty fair, that light northerly breeze never getting too disruptive, and we had some sunny intervals in the cloud breaks too.

The Ouse Brooks are limited for public access, with only one right of way cutting across the area at Rodmell, though the riverbank footpath does take you all the way north to Lewes or south to Newhaven. We obtained permission from the four landowners who own the area between Southease and the A27 at Lewes, so we stepped off the riverbank and descended into the fields and ditches maze. This is a real explorer's adventure trek, as one has to recce the area for culverts, field gateways and other crossing places to navigate from one ditch-bordered field to another.

It was a successful wildlife day, for we saw some great sights, including co-operatively posing Dark Green Fritillary butterflies and parachuting Meadow Pipits, to name but two classics. As to the dragons and damsels, we had plenty of easy spotting, thanks to all those accessible ditches, but not such a diversity of species. Some of these species were quite rare sights; others were, in places, abundant. Most popular were the Azure damselflies, often seen in ovipositing pairs. The highlight was some close-up observations of a brooks specialty, the Variable damselfly, though this was confined to a few choice ditches. Emperor dragonflies were observed across the area, whereas there was only a solitary record for Four-spotted Chaser; Black-tailed Skimmers were common and the more recently emerging Common and Ruddy Darters were starting to come into their own. 10 species noted in all. Damselflies: Azure, Variable, Common Blue and Blue-tailed. Dragonflies: Emperor, Hairy, Four-spotted Chaser, Black-tailed Skimmer, Common Darter and Ruddy Darter.

It is important to note a rather depressing observation, the state of the ditches. Most of our walk area was designated Site of Special Scientific Interest, with much in the Environmental Stewardship scheme. As such, this should be premium habitat, but it wasn't. Some ditches were quite enriched with run-off, suffering from eutrophication; others had mats of invasive alien plant species blanketing their surface, preventing any other life. Fortunately, there were some good quality ditches, with healthy clear water at a high level, containing a good mix of native submerged, floating and marginal vegetation, with the adjacent fields being grazed.

Leaving the habitat and management practices aside, it was a good day for some easy dragonfly spotting, I think everyone who attended would agree.

Phil Belden

# Sussex Wetlands Conference

A free one day conference hosted by the University of Brighton and the Sussex Wetlands Project will be held on Friday 6<sup>th</sup> January 2012, from 10 am - 4.30 pm at the Huxley Building, Moulsecoomb campus, University of Brighton.

This conference will bring together a wide range of professionals working on coastal and inland water, rivers and wetland-related issues in Sussex, in order to share knowledge and experience, establish and nourish networks, and develop conservation and research priorities.

Conference topics will include:

- issues affecting wetlands (e.g. climate change, flood risk, managed retreat, policy)
- case studies of wetland and river restoration projects
- updates on wetland habitats and species
- water resources and conservation
- Sussex-based wetland research
- innovative practices (e.g. for management or monitoring)

The conference is relevant to anyone interested in the past, present or future of wetlands in Sussex, including practitioners, researchers, consultants, managers, landowners, and conservationists. It will include presentations from leading figures in the conservation and the delivery of wetland policy and practice.

**CONFERENCE ATTENDANCE IS FREE. However, there is a charge of £12.50 for those who require lunch. Places are now limited.**

To book your place, please send your Full name, Affiliation/Job title & Contact details to:- Fran Southgate ([fransouthgate@sussexwt.org.uk](mailto:fransouthgate@sussexwt.org.uk)) at the Sussex Wildlife Trust

**For other Events & Courses see also**  
**[www.sussexwt.org.uk/events/courses\\_diary/index.htm](http://www.sussexwt.org.uk/events/courses_diary/index.htm)**





# Kids Corner

## How to make a Dragonfly on a stick !!

**With thanks to Cheshire Wildlife Trust**

These tiny flying friends are fantastically easy to make. We recommend that smaller children ask their parents to help them with the small beads and wire. All you need is (Picture 1):-

- 3 pipecleaners for legs
- 1 pair of wings — coloured or clear film, foil or card
- Coloured pens, glitter and things to decorate the wings
- 1 short piece of garden wire 10cm, 1 long piece of garden wire 15cm
- 2 beads for eyes
- 1 or 2 strands of wool for the body
- 1 wythie or stick

Thread the beads onto each end of the short wire. Fold over the ends and twist the wire to make sure the beads don't fall off. (Picture 2)

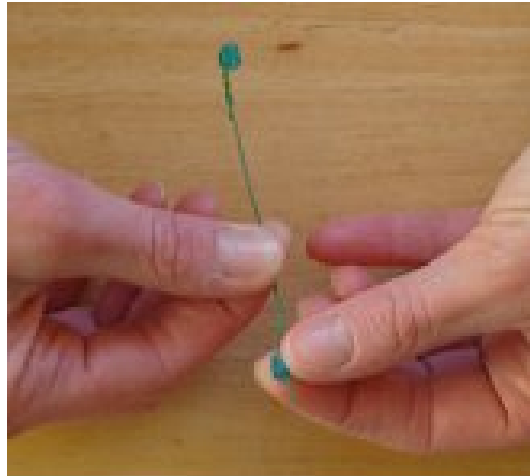
Attach the beaded wire to the thick end of the stick. These are your dragonfly's eyes. (Picture 3)

Wrap 1 or 2 strands of wool around the stick, ensuring that the wire with the beads is covered (Picture 4)

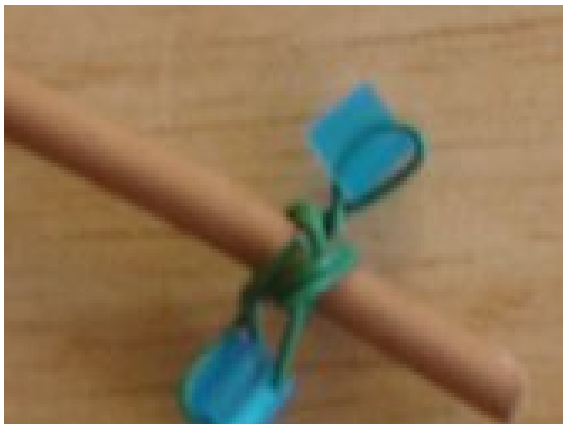
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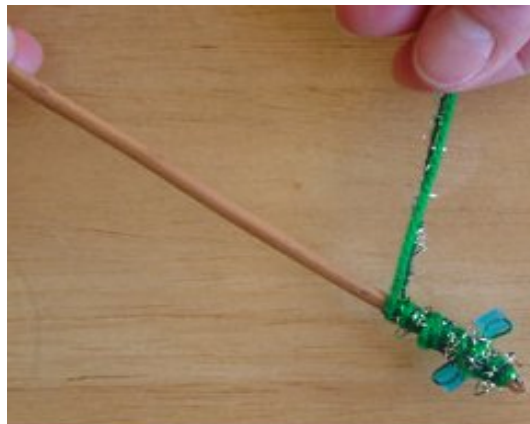
2)



3)



4)



## Make a Dragonfly on a Stick! Continued . . .

Continue to wrap the wool down the stick for about 10cm (Picture 5)

Loosely bring the remaining wool to the middle of the dragonfly and secure with a pipecleaner. (Picture 6)

Secure the other 2 pipecleaners around the body ensuring they are very close together (Picture 7)

Decorate the wings to look like veins through the dragonflies' wings. (Picture 8)

Secure the wings around the wool body, over the legs using the longer piece of wire. (Picture 9)  
Bend the pipecleaner legs to give them a knee and an ankle.

Your dragonfly is now complete. (Picture 10)

5)



6)



7)



8)



10)



9)





# 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 (Guide on how to do this to follow very shortly)
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)

We're encouraging recorders to add their records to <http://www.livingrecord.net/>. It's easy to use, and has been created with dragonfly recorders in mind. All of the records that you add to this data-entry website will filter back to us at the end of the year.



Four-spotted Chaser © D Sadler

## First and Last

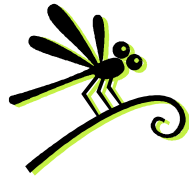
Common Darter seen flying up and down an agricultural ditch on the Ouse on Friday November 4th — I'm guessing its been so mild this year that this wont be our last sighting though.

# Here Be Dragons: Our Autumn Quiz on the Winged Wonders!



## Questions.

1. What is the largest damselfly in Europe?
2. Name the two species of brown coloured Hawkers in the UK?
3. What do the words **Randy Golf** and **Angry Fold** have in common?
4. Name the only European species of Odonata that doesn't lay eggs in a very wet place?
5. Name the UK's smallest Hawker?
6. Which UK Species is closely associated with aquatic plant Water-soldier?
7. Which blue damselfly has broad antehumeral stripes and no 'Coenagrion spur'?
8. Which species is literally a great hawker?
9. What is a Pterostigma?
10. Which vagrant species is the only hawker to lay eggs 'in tandem'?



## Welcomes, Thank You's & Goodbyes

Many thanks to everyone who contributed to this season's newsletter.

We must extend a HUGE thank you to John Luck, who has recently retired from the Sussex Dragonfly committee. As one of the early members of the group, he was our Recorder and co-author of the Dragonflies of Sussex book. He has played (and continues to play) a key role in the monitoring and conservation of dragonflies and damselflies in Sussex, as well as being an ace photographer, supplying us with some spectacular dragonfly images. John has promised us that he will continue his tireless work for Sussex Dragonflies, he'll still be organising some intriguing field trips and assures us he'll be at the next dragonfly get together.



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

1. We have developed our own version of Species Recorder called Odonata Recorder, which can be downloaded from <http://sxbrc.org.uk/odonatarecorder> . To report your sightings please use the new Living Record website, if you'd like to be registered to use this please contact [pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk) or alternatively you can send in a spreadsheet of your records — See page 26 for details.
2. Take photos of unusual dragonflies you see
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 damsel 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.

## Odonata Quiz Answers

1. The Beautiful Demoiselle
2. The Brown and Norfolk Hawkers
3. They are anagrams of Dragonfly.
4. The Willow Emerald Damselfly.
5. The Hairy Dragonfly
6. Norfolk Hawker
7. Common Blue Damselfly
8. Aeshna **grandis**. ('a great' in Latin)
9. A dark or coloured cell along the leading edge of the wing towards the tip. Or wing-spot.
10. The Lesser Emperor.

**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.**

# 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**

**Name of Adopted Site**

**OS Grid reference (where possible)**



**Graffham Common West Sussex. A nice site to visit to catch a glimpse of our rarer acid-water loving dragonflies and damselfly**



# Contacts

## Core Group

Chairman:	Phil Belden - Hobhouse, 47 Arundel Street, Brighton BN2 5TH
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:	Ben Rainbow — <a href="mailto:Ben.Rainbow@westsussex.gov.uk">Ben.Rainbow@westsussex.gov.uk</a>
Pond Conservation Advisors:	Jon Wood - <a href="mailto:jonwood555@hotmail.com">jonwood555@hotmail.com</a> or Bev Wadge - <a href="mailto:ponds@sussexwt.org.uk">ponds@sussexwt.org.uk</a>

## Other useful Contacts

Sussex Wildlife Trust — [www.sussexwt.org.uk](http://www.sussexwt.org.uk)  
Sussex Wetlands Project — [www.sussexotters.org](http://www.sussexotters.org)  
Wildcall – Free advice on all wildlife issues. 01273 494777; [WildCall@sussexwt.org.uk](mailto:WildCall@sussexwt.org.uk)  
British Dragonfly Society — <http://british-dragonflies.org.uk>  
Booth Museum - [boothmuseum@brighton-hove.gov.uk](mailto:boothmuseum@brighton-hove.gov.uk). 01273 292777  
Pond Conservation Trust — [www.pondconservation.org.uk](http://www.pondconservation.org.uk)  
Rivers Trusts — [www.associationofrivertrusts.org.uk](http://www.associationofrivertrusts.org.uk)  
National Insect Week — [www.nationalinsectweek.co.uk](http://www.nationalinsectweek.co.uk)

# Donations

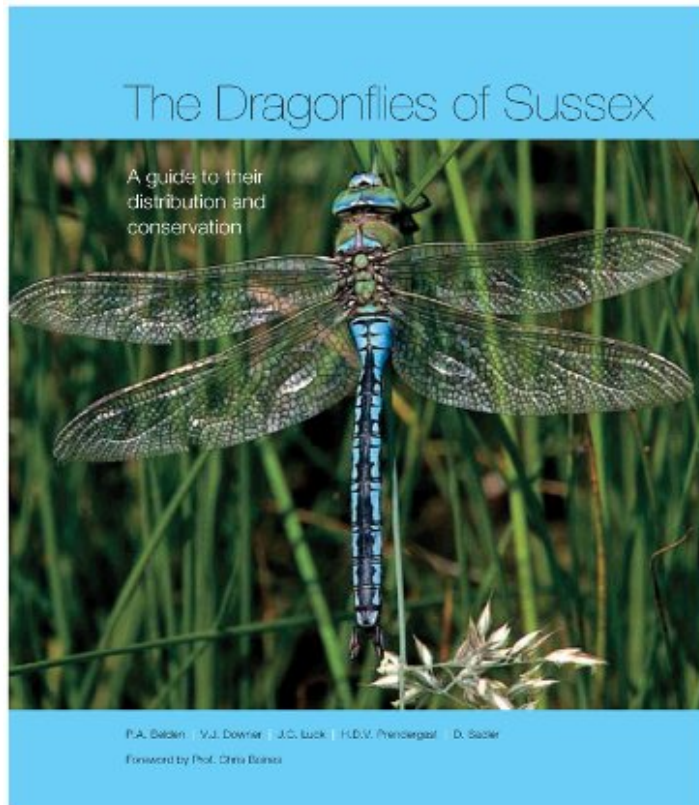
The Sussex Dragonfly Society is run exclusively with donations and proceeds from the sale of the Dragonflies of Sussex book.

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 Natural England leaflet 'Dragonflies and Damselflies in your garden' is available as a pdf file at :- [www.naturalengland.twoten.com/naturalenglandshop/docs/NE21dragonflies.pdf](http://www.naturalengland.twoten.com/naturalenglandshop/docs/NE21dragonflies.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.

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## Sussex Dragonfly Society Newsletter