

British Dragonfly Society

Sussex Group

Spring Newsletter 2011

No 26



Just in time for the new recording season... We are pleased to announce a new on-line recording tool, which has been designed by Adrian Bicker of the Dorset Dragonfly Group and has kindly been made available for us to use in Sussex. It has been trialed and tested and is being rolled out for many different dragonfly recording groups to start using this year. We are keen to start using it to help facilitate the flow of data between dragonfly recorders, the BDS Sussex Group and the Sussex Biodiversity Record Centre. This will make your data entry and data sharing a whole lot easier, and you'll be able to go back and view your records, and other people's, on the on-line maps whenever you want.

For more information about this exciting new tool, go to page 5....



Recently emerged Brilliant Emerald © D Sadler

Enormous Paleozoic flesh-eaters created in lab

By [Lewis Page](#) Ed F Southgate

Scientists in the USA say they have successfully carried out a Jurassic Park-style experiment in which enormous prehistoric dragonflies from the past have been successfully bred in the laboratory. Surprisingly this laboratory is not located on some remote island miles away from civilisation.

During the late Paleozoic around 300 million years ago the Earth was, if not exactly terrorised, very seriously bothered by swarms of gigantic dragonflies. Although at the time their size was very much in context, these insects were nonetheless formidable, with wingspans around 70cm across and large, biting jaws which helped them to hunt live prey.



After a lengthy struggle Dr John VandenBrooks managed to breed dragonflies which were 15% larger than our current dragonflies in his Arizona laboratory. This greatly enhanced size was achieved by enhancing atmospheric oxygen levels to 31 per cent, which is thought to be the amount of oxygen available to life in the Paleozoic era (today's air is only about 20 per cent O₂).

The hard bit, according to the Professor was not the creation of this artificially enriched (or "hyperoxic") atmosphere but the actual care and feeding of the monstrous, prehistoric winged flesh-eaters. "Dragonflies are notoriously difficult to rear," stated VandenBrooks. "We are one of the only groups to successfully rear them to adulthood under laboratory conditions."

As juveniles, dragonflies need to hunt live prey and in fact undergraduate students Elyse Muñoz and Michael Weed working with Dr VandenBrooks had to resort to hand feeding the dragonflies. It's hoped that the unfortunate undergrads escaped from the hyperoxia chambers with their hands and other body parts intact!

Not content with his creation of huge flesh-eating Paleozoic hyper-dragonflies, VandenBrooks also sought to breed greatly enlarged cockroaches and other horrors using similar hypercharged breeding pens. However this time the experiments were a failure, even once the hyper-roaches had been blasted with incredibly powerful energy rays using a handy atom-smasher.

Posted in [Biology](#), [1st November 2010 12:17 GMT](#)

Dragonfly wings inspire micro wind turbine design

New Scientist 02 February 2011

by Winifred Bird

The way a dragonfly remains stable in flight is being mimicked to develop micro wind turbines that can withstand gale-force winds.

Micro wind turbines have to work well in light winds but must avoid spinning too fast when a storm hits, otherwise their generator is overwhelmed. To get around this problem, large turbines use either specially designed blades that stall at high speeds or computerised systems that sense wind speed and adjust the angle of the blade in response. However, this technology is too expensive for use with micro-scale turbines because they don't produce enough electricity to offset the cost.



That's where dragonflies come in.

As air flows past a dragonfly's thin wings, tiny peaks on their surface create a series of swirling vortices. To find out how these vortices affect the dragonfly's aerodynamics, aerospace engineer Akira Obata of Nippon Bunri University in Oita, Japan, filmed a model dragonfly wing as it moved through a large tank of water laced with aluminium powder. He noticed that the water flowed smoothly around the vortices like a belt running over spinning wheels, with little drag at low speeds.

Obata found that the flow of water around the dragonfly wing is the same at varying low current speeds, but, unlike an aircraft wing, its aerodynamic performance falls drastically as either water speed or the wing's size increases. As air flow behaves in the same way as water, this would explain the insect's stability at low speeds. One disadvantage of this is that while the dragonfly-inspired design may be more stable, it will also experience more energy loss in terms of drag.

Obata and his colleagues have used their findings to develop a low-cost model of a micro wind turbine whose 25-centimetre-long paper blades incorporate bumps like a dragonfly's wing. In trials in which the wind speed over the blades rose from 24 to 145 kilometres per hour, the flexible blades bent into a cone instead of spinning faster. The prototype generates less than 10 watts of electricity, which would be enough to recharge cellphones or light LEDs, the researchers say.

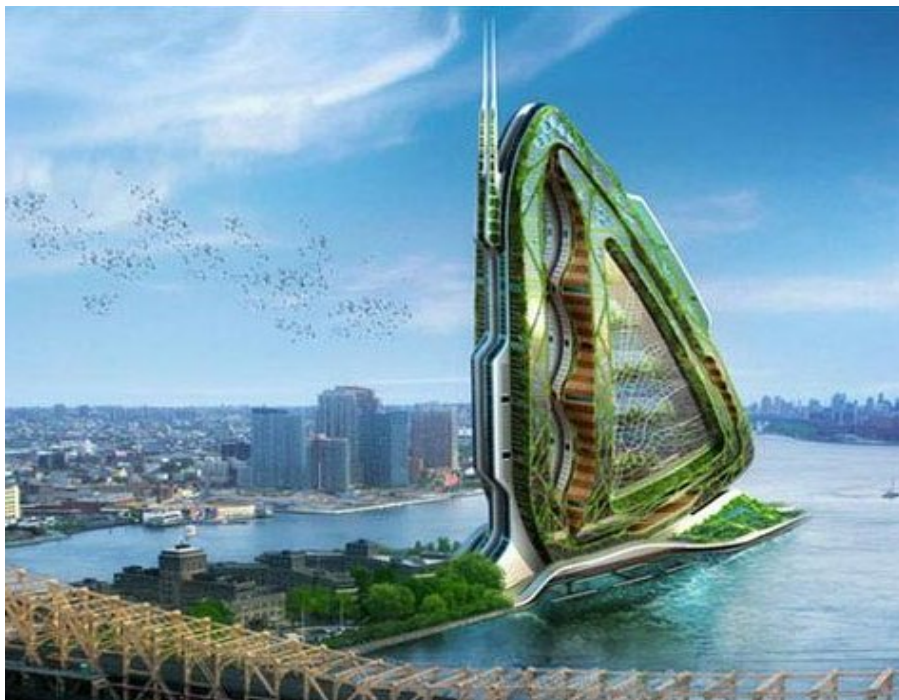
"It's a clever leap," says David Alexander, a biomechanics specialist at the University of Kansas.

The Dragonfly

A vertical farming vision for New York

Building another skyscraper in the middle of New York may not seem like the most environmentally friendly thing to do. That is of course, unless the skyscraper is capable of providing a sprawling urban populous with food, the reuse of natural resources and biodegradable waste.

The Dragonfly is the brainchild of Belgian company Vincent Callebaut Architectures and underlines the future potential of vertical farming that was first realized by designs such as Dubai's seawater vertical farm and Eric Vergne's Dystopian Farm concept.



The unique approach taken by Callebaut begins with the design, which mimics the wings of a dragonfly both for aesthetic merit and to facilitate the use of renewable energy resources such as solar, wind and tide-turbine power. In addition, the space between the pair of "wings" would use solar energy production to accumulate warm air within the structure during winter months, and the design of the spine would efficiently separate and recirculate waste products from plants, humans beings and animals.

A 600 meter high vertical complex would contain 132 floors accommodating 28 different agricultural fields, including housing, office space and laboratories as well as orchards, farms and production rooms. The idea is inspiring, incorporating many permaculture and sustainability ideas, and it has the potential to be a true sign of a change in the way humans interact with their environment.

The importance of research in this area is highlighted by the United Nations Development Program who argue that by 2025, worldwide urban population have risen from 3.1 billion to 5.5 billion. The ability of an ecological city to be self-sustainable and to reduce waste and pollution by reuse of natural resources and biodegradable waste would therefore be an essential part of a stable, ecological future. Research by the Food and Agriculture Organization in the US suggests that organic agriculture could eventually provide enough food to nourish the planet if developed on a large scale. Although any such project would require substantial initial investment, the long-term benefits would seem to far outweigh the short-term cost. We have the long and intricate evolution of the dragonfly to thank for helping us get one step closer to this vision.

By Paul Lester (04:17 July 16, 2009 PDT)

Dorset — Sharing New Online Recording Technology

by Adrian Bicker

During the 2010 season in Dorset, we have been using a new Google Maps-based online database for our Dragonfly records www.LivingRecord.net. This new recording tool has proved immensely popular with our recorders and we ended the season with over 2,100 records for VC09, which compares well with the 300 records that DERC has for the previous two years. Now we know it works, we are inviting other Dragonfly recorders everywhere to use it.

The whole purpose of the database is to make it quick and easy to enter records. It also allows the county recorder to validate the records online and ultimately download a single Excel file of validated records for each vice-county for the Record Centres and BDS.

User: ADRIAN Dorset Dragonfly Group

Grid Ref: SZ 01005 98680
Site: Merley Pond - west end
Habitat: Recently converted from woodland and scrub back into a lake by the owner

Records	1 Jan 2010 to 31 Dec 2011 (7)	Certainty	Total Adults	M	F	teneral	coupled pairs	egg laying	Larva	Exuvia	Emergent
Dragonflies	7 species	Sure=5									
09/07/2010											
Azure Damselfly (<i>Coenagrion puella</i>)	5	10									
Common Blue Damselfly (<i>Enallagma cyathigerum</i>)	5	15									
Blue-tailed Damselfly (<i>Ischnura elegans</i>)	5	1									
Brown Hawker (<i>Aeshna grandis</i>)	5	1									
Emperor Dragonfly (<i>Anax imperator</i>)	5	3						1			
Black-tailed Skimmer (<i>Orthetrum cancellatum</i>)	5	7									
Ruddy Darter (<i>Sympetrum sanguineum</i>)	5	2					1	1			

Male (M), female (F), teneral, coupled pairs and egg laying should also be included in the total adults figure.
Numbers for Adult + Exuvia + Emergent are used for distribution maps.

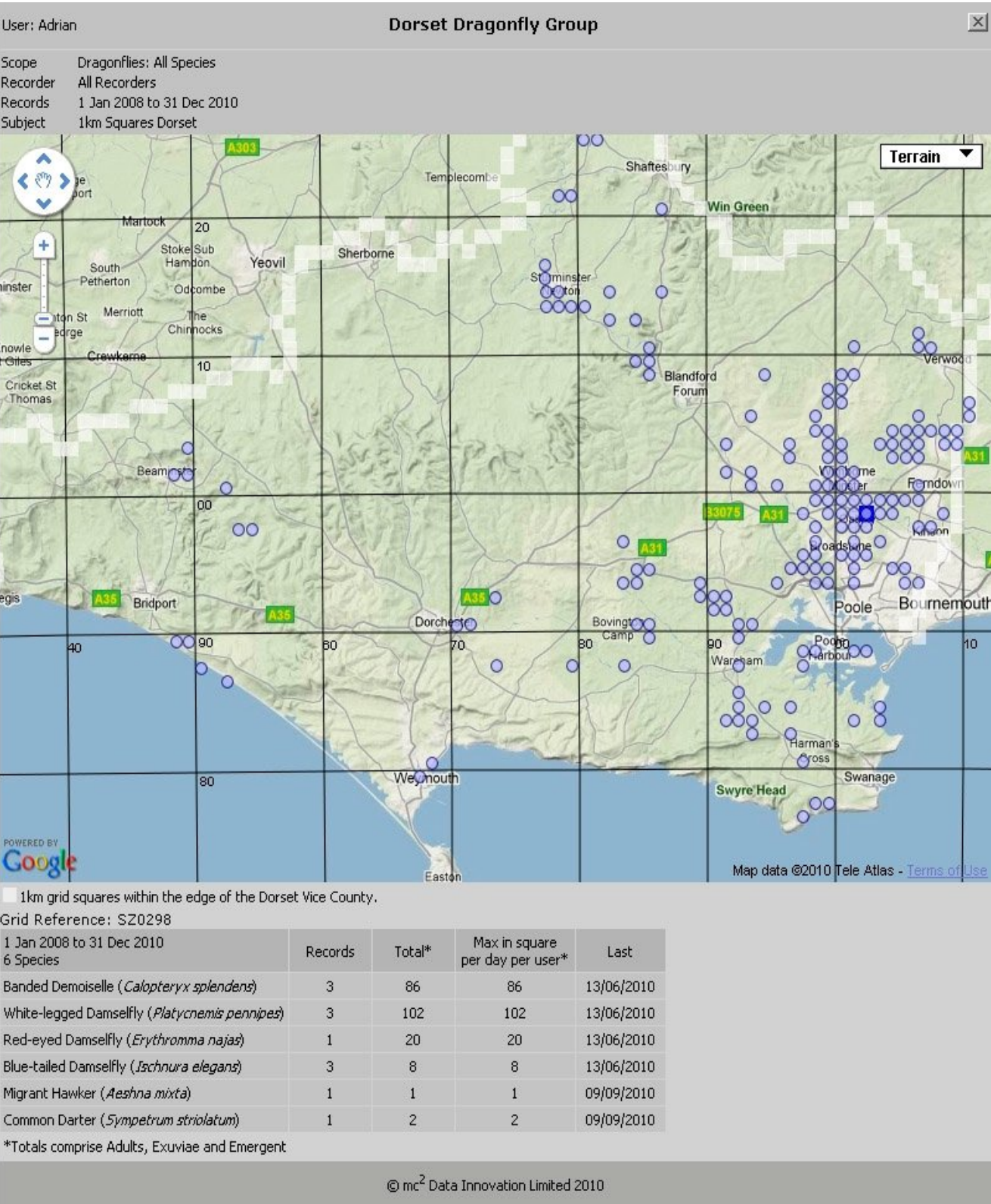
Add New Records:

© mc² Data Innovation Limited 2010

To enter records, you add a marker to the map and give it a location name. Then you enter the records for the location, choosing the species from a drop-down list. Job done! You get your own personal records system. Click on any marker to list your records, which you can admire, amend or delete as you like. This screen shows the records for the highlighted location in the centre of the map.

Continued

As the records build up, you can monitor progress using a series of distribution maps. Some cover all species while others show the distribution of a single species, often with an indication of abundance. Maps that combine all records help you to work together as a team. You can see which areas have been covered and which still need to be surveyed. If you want to learn more about Sussex Dragonflies, you will also discover where you can see some of the less common species.



Continued

If you would like to have a go, All you need is a user name and a password. Just email Penny Green with your request: pennygreen@sussexwt.org.uk and she can help you log on to the system. The recorder has proved to be more valuable than we first thought. One final conundrum for you to try and work out. Only when studying the distribution maps did it become clear that the shallows in the River Stout west of Wimborne have the largest numbers of Banded Demoiselles. Why might that be?

Happy recording. Adrian.



A note from Penny Green: please can you only add your records from 2011 onwards on to this database, as this could cause duplicate record problems otherwise! Thank you!

Dragonfly Pupils

For those of you who have been following our website, you may remember that a while ago, John Luck posted a White Legged Damselfly photo which showed the dark inner part of the damselflies eyes bearing a striking resemblance to human pupils. Not surprisingly, no-one knew what might have caused this strange phenomenon, so John put the question to David Chelmick.

He replied as below:

"What you are looking at in your picture is a group of 30,000 + cells all angled to a central ganglion collecting each pinpoint of light to form an image. The reason for the colour pattern which looks like a pupil is that the way the light is reflected from the surface varies depending on the angle that you are looking at the eye. In this case the "so called" pupil will move with you – ours doesn't.. The insect eye is probably one of the worst aspects of insect evolution; it cannot focus. The problem with evolution is that it cannot go backwards so the best was made, particularly by dragonflies, of a bad job."



Emerald Damselfly © D Sadler



EYE — D Corner No 8

Identifying Skimmers

Skimmers are very similar to the Chasers and as a beginner you may find it difficult to distinguish between the Black-tailed Skimmer (*Orthetrum cancellatum*), Keeled Skimmer (*Orthetrum coerulescens*), Broad-bodied Chaser (*Libellula depressa*) and Scarce Chaser (*Libellula fulva*).

All four dragonflies are reasonably sized, with males with powdery-blue bodies, and more or less yellow coloured females. Skimmers are similar to the Chasers but are less broad in the abdomen and they have completely clear wings. The skimmers are fast, low-flying insects which spend time resting on a regular perch (usually a stick or bare ground) when they are not defending territories.

It is probably easiest to first eliminate the male & female Broad-bodied Chasers with a beginners eye. Both male and female Broad-bodies have dark patches at the base of each wing where it connects with the abdomen which is obviously broad and flat.

Right: Male Broad-bodied Chaser © B Rainbow.
Note the dark patches at the base of each wing and the broad abdomen.



Next to eliminate the Scarce Chaser which has a unique combination of a black-tipped, powder-blue abdomen, and dark patches at the base of each wing. Both males and females often have a smoky-yellow patch running along the upper edge of the wings.

Left: Male Scarce Chaser © J Luck. Note the black rub marks where mating has taken place with a female, and the dark patches at the base of each wing.

Now to the Skimmers themselves. The Black-tailed Skimmer is relatively common in Southern England and is locally common throughout Sussex. It is likely it is also under-recorded in Sussex. It flies from mid May to late August and prefers large, shallow, open ponds, lakes, gravel pits, ditches and slow moving rivers. They have a liking for bare ground near the water where the males can sun themselves.

Skimmer ID Continued

The male Black-tailed Skimmer has a grey-brown thorax and a powder-blue abdomen with a black tip (tail) and yellow /orange elongated spots on the sides. The female has striking black, curved, bracket-shaped markings on either side of her abdomen.



Female Black-tailed Skimmer © D Mitchell. Note there is no black line running along the middle of the abdomen as in a female Keeled Skimmer



Black-tailed Skimmer male © J Wilson

With age, the male of the Scarce Chaser and Black-tailed Skimmer often develops black scratch marks where the female's legs have grasped the abdomen during mating. The female tends to become more tawny-brown or bluish-grey with age.

In comparison, the Keeled Skimmer is locally common in the UK but is rare in Sussex and has had under 100 recorded sightings in the County since 1989. The Keeled Skimmer prefers acid habitats such as acid pools, streams and ditches in heathy areas, usually where Sphagnum mosses are present. Most of the Sussex records are found at Ashdown Forest where the dragonfly is at the eastern edge of its range. The Keeled Skimmer flies later than the Black-tailed, and can be seen only from around later June to mid August. The Keeled Skimmer is a darter-sized dragonfly with an obviously slim, tapering abdomen. The male has a pronounced 'keel' especially when viewed from the side and the female has a black line running along the top of the abdomen from the head to the tail.



Keeled Skimmer © J Luck

So, in summary, when looking for ways of distinguishing the Skimmers, keep an eye out for:-
Skimmers — which have completely clear wings

Chasers — which have partially or completely coloured or marked wings

Male Black-tailed Skimmer — Yellow/orange spots on side of abdomen and obvious black 'tail'

Female Black-tailed Skimmer - Bracket-shaped, curved black markings on side of abdomen

Male & female Broad-bodied Chaser — Dark patches at bases of wings and obvious broad abdomen

Male Scarce Chaser - Unique black-tipped, powder-blue abdomen

Scarce Chasers - Dark patch at base of each wing, smoky-yellow patch along upper edge of wings.

Keeled Skimmer — Prefers acid, heathy habitats.

Male Keeled Skimmer - Obvious 'keel' or pinched abdomen

Female Keeled Skimmer — Obvious black stripe running along centre of abdomen

National News



British Wildlife Photography Awards 2011 Call for Entries

Try your hand at award winning photography and at the same time highlight the beauty of dragonflies to a wide audience.

- Win a prestigious photography award and cash prize of £5,000
- £20,000 prize fund
- Winners will have their work showcased in a national touring exhibition and in a stunning book published by AA Publishing
- Three new categories including a video award
- 3 special awards for young people and schools

The competition will be open for entries from 1st February 2011. The closing date is Thursday 2nd of June 2011. Entrants will be able to submit entries on-line or via post.

Now in its third year these awards recognise the talents of photographers of all nationalities practicing in the UK, while at the same time highlight the great wealth and diversity of British natural history. For more detailed information about the competition, including how to enter, a full description of categories, shooting tips, and terms & conditions, please visit the competition website: www.bwpawards.co.uk.



BDS urges vigilance for killer shrimp

This non native invasive shrimp species *Dikerogammarus villosus* has reached the UK after spreading from the Ponto-Caspian region of Eastern Europe. The shrimp has been dubbed the 'Killer Shrimp' as it is a ferocious killer of waterlife including dragonfly larvae. Anyone using waterbodies or water-courses should look out for *D.villosus* and should clean and dry any equipment used thoroughly to avoid spreading the species further.

D. villosus, was first reported in the UK in Grafham Water SSSI in Cambridgeshire and has subsequently been detected in Wales. There is information about the shrimp in a briefing note issued by Natural England describing where the species has been found, measures being taken to stop it spreading, what you can do and the potential impacts of the shrimp. An identification guide can be found at : www.riverflies.org/index/Killer_shrimp_alert/contentParagraph/0/document/DVillosusId.pdf. If you see the shrimp, please report it to alert_nonnative@ceh.ac.uk.

Local News



New Treasurer Needed

Following a dedicated service of at least 7 years, our treasurer has finally ceded his post. He has done a sterling job for the Sussex Dragonfly Group and we thank him sincerely for all his efforts. This does however mean that we are now seeking a new treasurer for the group and we would welcome any offers of help. The job is not too onerous as we only really have one stream of income from the Dragonflies of Sussex book and very few outgoings. Its not a full time job by any stretch of the imagination, but someone who is interested in being around for the long term would be appreciated. So if you fancy helping dragonflies but you are not the best person at field identification then perhaps you can help them by becoming treasurer. Hopefully it will give you more frequent access to our local experts as well as a sense of job satisfaction ! If you are interested, please contact penny-green@sussexwt.org.uk .



Species Champions

We would like to welcome our three new Species Champions. These keen dragonfliers have promised to take the following species under their wing:-

Dave Mitchell for Downy Emerald

Ben Rainbow for Golden-ringed Dragonfly

Dave Elliott for Black Darter

These fine fellows have signed up for a long term commitment to trying to improve the recording and knowledge of their chosen species.



Female Southern Hawker © D Sadler



Odonata Recorder

A number of people have been having problems with Odonata Recorder, and we hope that once you have sent in your records you will be able to transfer your recording to the new and much easier recording system on Page 5. However, if you have not been able to access the software for Odonata Recorder. Just in case it hasn't been tried, for those of you experiencing problems, you may need to enable macros before you can use the software. We hope this helps!

Meet the Committee . .

And our recording guru Penny Green

Having been interested in bird-watching and being outdoors for as long as I can remember I decided to study Countryside Management at Brinsbury College after my A-levels. Whilst doing this course I learnt about land use, conservation, habitats and the different species groups we have in Sussex, and this spurred me on to get in to recording. I managed to get a job with the National Trust as a seasonal warden at Black Down and Witley Common as soon as I finished the course, and this gave me the valuable experience that I needed to put all that I had learned at college in to practice. I learned loads about dragonflies and the acid pool habitats that had been created on Black Down, which sparked an interest in dragonflies....(since then Small Red Damselflies have been discovered there!)

At the end of my seasonal role with the NT I found a job as the receptionist for the Sussex Wildlife Trust at their Woods Mill Nature Reserve near Henfield. Following that I worked for the Natural History Photographic Agency as a picture researcher which was just brilliant for me to learn species identification as I spent all day every day looking at pictures of wildlife, both British and worldwide. Finally the big day arrived and I got a job with the Sussex Biodiversity Record Centre (SxBRC); my dream job and I'm back at Woods Mill! What better place for me to get involved with the different recording groups, and to learn about species identification!

We are lucky at Woods Mill to have some great dragonfly habitats, such as the lake, the dipping ponds, woodland rides and streams, so it's lovely at lunchtime to walk around and see the dragonflies and damselflies on the reserve, as well as the butterflies and birds. Most of my learning of dragonflies has been done at Woods Mill, gradually building up my knowledge through the seasons, and by attending the dragonfly group's excellent field events to see some of the other, more specialist, species. Although I still have a few more to see yet before I have a 'complete set'!....

My role at the SxBRC is Species Officer; I spend a lot of time liaising with local and national recording groups, schemes and societies, making sure that we're doing regular data-exchanges and checking that the data that we hold in the SxBRC database is of a good quality. I oversee the species data coming in and going back out of the SxBRC, so my job is quite varied! Out of work time, me and my husband Dave spend all of our spare time enjoying wildlife, including Stone Curlew and Long-eared Owl survey work, and moth-trapping at different sites and habitats across Sussex. And when we have a spare day there's nothing we like better than a visit to Old Lodge, the Wildlife Trust Reserve to see the dragonflies and damselflies in the wonderful dragonfly ponds that have been created there.

The most intriguing place I have found a dragonfly? a Black-tailed Skimmer in fact, on the green roof of the Rolls Royce factory!



Dragonfly Group Forays into Sussex

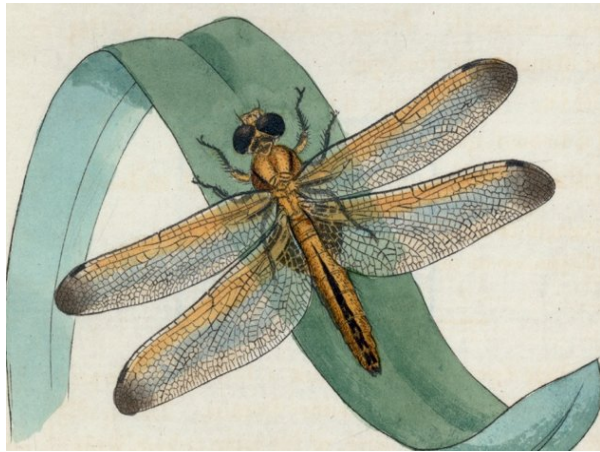
This year we've been quite active, getting out and about at local Wildlife events thanks to our publicity officer and our dedicated volunteer Committee. These events include:-

Mince Pies and Mulled wine Oh yes; and Dragonflies!

Our Christmas AGM

We were pleased to extend a festive welcome to many of the Sussex Group Members here at Woods Mill. As well as being 'refreshed' with mince pies and mulled wine, two of our most prodigious dragonfly recorders, John Luck and Dave Chelmick shared some of their dragonfly wisdom with all those who attended.

John Luck told the tale of the rediscovery of the Scarce Chaser in East Sussex whose first ever recorded sighting was on the Lewes Downs in 1853 by a Mr W.C. Unwin, which he describes as:-



"a tribe of beautiful insects, of which rarely a notice creeps into the journals devoted to Natural History". Sadly very little recording of the species occurred after that, with the only two West Sussex records on the Western Rother and Arun rivers at Midhurst in 1924 and Pallingham in 1937. The next exciting discovery of the species was made by our (now retired) treasurer on the River Adur in 1989. Despite long searches by the Sussex dragonfly team prior to the publication of the 'Dragonflies of Sussex' book, there were still no records of the species in East Sussex. A curious tale.

Then as if from nowhere in 2006, 10 adult male Scarce Chasers were found by John on the Cuckmere, and the very next week by Phil Belden on the neighbouring River Ouse. Records submitted by recorders in 2006 then revealed earlier sightings in 2005 on the Cuckmere. There was even a confirmed record of two juveniles on a garden pond at Saltdean — half a mile from the sea and a good four miles from the Ouse, highlighting the species' capacity to migrate. It was obvious they were here to stay, but their occurrence appeared sporadic and the theory is that perhaps their emergence is limited to 2 yearly larval cycles.



Newly emerged Scarce Chaser © J Luck

Continued

Diligent searches of the riverside margins of the Ouse in 2010 showed that despite the lack of any visible flying dragons, their slightly more prehistoric looking counterparts were still lurking in larval form in the undergrowth! Needless to say that we welcome any of your records of Scarce Chaser, particularly from East Sussex. We still have no records at all on the Brede, Tillingham or Eastern Rother Rivers, nor on Pevensey Levels.



Wild about Mid Sussex event:

On the 6th November 2010 two committee members, Ben Rainbow and Vicky Hale, attended the Burgess Hill Green Circle's 'Wild about Mid Sussex' event. Over 1,000 people attended the event, so there was a good amount of traffic passing the stand. One hundred dragonfly pegs were made by children visiting the stand, and we were able to advertise the group's website and sell some books.

Sussex Ornithological Society conference:

On the 29th January 2011, Ben Rainbow and Penny Green manned the dragonfly stand at the Sussex Ornithological Society's annual conference. We had lots of interest and signed up 17 new members, and had visits from existing members so thanks for coming by! We heard about how people are digging ponds in their gardens to attract dragonflies: good stuff!

Sussex Biological Recorder's seminar:

At the annual recorder's seminar, on 5th February 2011, Ben Rainbow manned the dragonfly stand, selling books and handing out details of the group's website out to potential new members.

Dragonfly Events

Local

Dragonflies' Den

Venue: Ditchling Common, E Sussex

Date: Sunday 15th May **Time:** 13:00 - 16:00

Tutor: Mike Russell

Content: A family event with games, activities and guided walk looking at the varied habitats of Ditchling Common. Follow the dragonfly trail and have a go at pond dipping to learn about dragonflies and other pond life. The walk will be about one mile with some uneven ground. Sorry no dogs. No toilet facilities.

Contact: on day of event 07986 703088 **Cost:** Donations

For more information please visit www.accessingthecountryside.eu **Grid Ref:** TQ 337180

An Introduction to Dragonflies & Damselflies

Venue: Woods Mill, Henfield

Date: Saturday 2 July **Time:** 10:00 - 16:00

Tutor: Mike Russell

Content: For beginners or those with some knowledge who would like to find out more about dragonflies and damselflies.

Learn about: Basic biology, identification tips and the range of species found in the UK & Sussex

Course Highlights • Afternoon session out on the reserve looking for dragonflies and damselflies and putting identification tips into practice

To book please ring 01273 497561 **Cost:** Members/concessions £24, Non-members £34

An Introduction to Dragonflies & Damselflies

Venue: Lewes Railway Lands

Date: Friday 15 July **Time:** 10:00 - 16:00

Tutor: Mike Russell

Content: For beginners or those with some knowledge who would like to find out more about dragonflies and damselflies.

Learn about: Basic biology, identification tips and the range of species found in the UK & Sussex

Course Highlights • Afternoon session out on the reserve looking for dragonflies and damselflies and putting identification tips into practice

To book please ring 01273 497561 **Cost:** Members/concessions £24, Non-members £34

Springwatch

Venue: Stanmer Park, Brighton

Date: June 5th 2011 **Time:** 10.00 — 17.00

Content: Enjoy a fantastic free family day out organised by Brighton & Hove City Council and Sussex Wildlife Trust. It's the perfect chance to find out all about your local wildlife, learn how to create a wildlife haven outside your own back door, see birds of prey in action, get to know some llamas, enjoy hands-on activities in the Downland, City, Woodland and Marine Zones, go pond-dipping, watch displays of sheep shearing, take a ride on a horse-drawn cart, sample great-tasting local produce, drink some local beer, watch traditional woodcraft demonstrations, enjoy top class entertainment by local performers...oh and not forgetting that the dragonfly group will be there too!!

See also www.sussexwt.org.uk/events/courses_diary/index.htm
for other wetland events and courses

Frog Firle

Date & Time: Sunday June 5th, 11am - 1pm.

Leader: John Luck

National Trust led event "Introduction to dragonflies" for beginners, although everyone welcome. We will be exploring the ponds and ditches and anticipate seeing Hairy Dragon, Four-spotted Chaser and possibly Scarce Chaser

Meet at: Tile Barn (TQ516016)

Field Trips

The locations of this years field trips have been agreed, although some leaders and dates are still to be confirmed. Do keep the dates in your diaries though and check the website for updates.

Lewes Brooks

Date & Time: Early July.

Leader: Tbc

Sights should include the Variable Damselfly .

Beginners Day at Woods Mill

Date & Time: 24th July, 10am to 2pm,

Leader: Tbc

Meet at: Woods Mill Car Park

Ashdown Forest

Date & Time: Saturday August 6th, 10.30am

Leader: John Luck

A return to Old Lodge/Moorlands field trip .

Meet at: Old Lodge carpark for morning session, Moorlands after lunch

St Leonards

Date & Time: Mid August

A trip to search for late hawkers and emeralds.

Leader: Tbc

National Events

Wicken Fen Dragonfly Day

Saturday 11th June 2011

The British Dragonfly Society and the The Dragonfly Project, in partnership with the National Trust, will be running a Dragonfly Day at Wicken Fen on Saturday 11th June. There will be activities at the Dragonfly Centre and in the Wren Building, as well as on the Reserve itself.

We're planning the following:-

- 45 minute Dragonfly 'Taster' Walks, linked to 15 minute Larva-feeding demonstrations
- Pond-Dipping
- Pipe-cleaner dragonfly assembly
- Origami dragonflies
- Worksheet-prize activity
- Additional, youngster-oriented activities

If you fancy giving the Dragonfly Day your support, please notify Lynn Curry on 01733 204286 or lynn_fitc@btinternet.com. We hope to see you there!

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



Four-Spotted Chaser © D Sadler

First and Last

Our first recorded damselfly so far this year was a record sent in by Jane Willmott, Living Landscapes Officer at Sussex Wildlife Trust. This very friendly Large Red Damselfly was seen at SU 978 180 on 6th April at about 11am. If you've got any earlier records let us know :)



Kids Corner

How to make a clothes peg dragonfly

Materials

You will need:

Something to cover your table or work station with like newspaper
Some of your mum's clothes pegs!
Brightly coloured paints or felt tip pens. Think about what colour dragonflies are. Blues, greens, silver and yellow are good colours.
A paintbrush
Scissors
Some sticky googly eyes (you can buy these from craft shops)
Some pretty (preferably sparkly) material — netting or similar, which looks like dragonfly wings
Thread or pipe cleaners
Sequins
Glitter or glitter glue
Magnetic tape (optional)

Instructions

1. Cover your work table with a plastic sheet or scrap paper to make cleaning up easier and to protect the surface from paint spills.
2. Paint or colour your clothes pegs in dragonfly colours. Use a paper towel to wipe excess paint off the hinges to ensure they will still open and shut easily when the paint dries.
3. Cut a 3-inch square of fabric to make the dragonfly's wings.
4. Fold one side of the fabric up 1/2 inch and make a crease with your fingernail. Flip the fabric over and fold the same edge up 1/2 inch and make another crease. Continue flipping and folding until you have a 1/2-inch-wide strip that resembles a folded paper fan.
5. Tie the middle of the fabric fan with some thread or a pipe cleaner
6. Open the mouth of the clothes peg and put the centre of the fabric fan (the dragonflies wings) into the clothes peg's mouth so it looks like the dragonfly has wings either side of its body
7. Stick two plastic wiggle eyes to the end of the clothespin near the wings to create the dragonfly's head.
8. If you want to make your dragonfly extra sparkly, decorate it with sequins and glitter



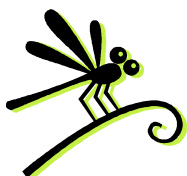
You can turn the handmade dragonfly clips into magnets to hold notes, pictures or artwork on a refrigerator by fixing a 1-inch-long piece of magnetic tape adhesive to the back of the clothespins

Here Be Dragons: Our Spring Quiz on the Winged Wonders!



Questions. True or False?

1. Which dragonfly species has the smallest larva?
2. Which damselfly species was the most recorded across Sussex in 2009?
3. Some dragonflies adopt the Obelisk position (not yoga!) what is it and its function?
4. The larva of which damselfly species found in Sussex can develop in as little as 8-12 weeks?
5. In which country are dragonfly nymphs called 'Mudeyes'?
6. Name the four Sussex species of Odonata on the IUCN Red Data list?
7. Which British damselfly species has the largest larva?
8. The nymphs of which dragonfly species can take five years to reach emergence?
9. What is the smallest hawkier species in Sussex?
10. Which rare vagrant species will be found in Sussex this year?



Welcomes, Thank You's & Goodbyes

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

A sincere thank you to Dave Sadler for his many years of dedication and hard work as SxBDS Treasurer. We wish him well and hope we will still see him on many a dragonfly foray.

Welcome to Jon Wood who has recently joined the group and who brings his expertise in ponds with him.

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> . Report your sightings either on the SDS recorder, or to the Sussex Biodiversity Records Centre at Woods Mill
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 penngreen@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.

Odonata Quiz Answers

1. Black Darter.
2. Azure.
3. Abdomen pointed towards the sun to avoid overheating.
4. Emerald.
5. Australia.
6. Brilliant Emerald, Common Club-tail, Scarce Chaser, Variable damselfly.
7. The Banded Demoiselle 30-40mm.
8. The Golden Ringed...
9. Hairy Dragonfly.
10. You tell us!! We cant wait to find out from this years records!!

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)



Immature Scarce Chaser © D Sadler

Contacts

Core Group

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Editor & Wetland advisor:	Fran Southgate - fransouthgate@sussexwt.org.uk
Sussex BRC:	Penny Green - 01273 497521; pennygreen@sussexwt.org.uk
Website:	Victoria Hume — Please contact via Fran Southgate
Press/Publicity:	Ben Rainbow — Ben.Rainbow@westsussex.gov.uk
Pond Conservation Advisors:	Jon Wood - jonwood555@hotmail.com / Bev Wadge - ponds@sussexwt.org.uk

Other useful Contacts

Wildcall – Free advice on all wildlife issues. 01273 494777; WildCall@sussexwt.org.uk
British Dragonfly Society - bdssecretary@dragonflysoc.org.uk
Booth Museum - boothmuseum@brighton-hove.gov.uk. 01273 292777
Pond Conservation Trust — www.pondconservation.org.uk
Sussex Ouse Conservation Society — www.sussex-ouse.org.uk
Sussex Wildlife Trust — www.sussexwt.org.uk
Sussex Wetlands Project — www.sussexotters.org
National Insect Week — www.nationalinsectweek.co.uk
British Dragonfly Society Shop — www.dragonflysoc.org.uk/shop.html

Donations

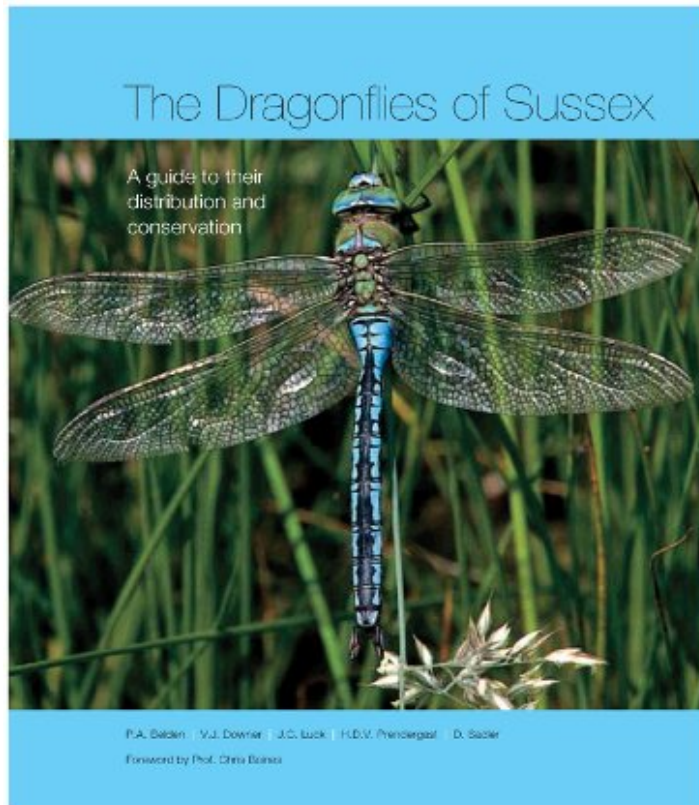
The Sussex Dragonfly Society is run exclusively with donations and proceeds from the sale of the Dragonflies of Sussex book.

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
- 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
- "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

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Sussex Dragonfly Society Newsletter