

# British Dragonfly Society Sussex Group

## Autumn Newsletter 2010

No 25



### Phenomenal Phenology

Well, another wondrous English summer has passed and the flights and fancies of our winged wonders have been fastidiously recorded by our lovely readers. Despite a wintry start to the year, there have been some big surprises, not least how late dragonflies are still being seen in Sussex, even as we go to press in late October. More impressively however, the grand efforts of our many recorders are now getting noticed at a national level.

This year, Sussex recorded the first sightings of the year in the UK of the Azure Damselfly and the Black-tailed Skimmer, records which in years to come will help tell us a great deal about the changes which are happening in our environment over time.

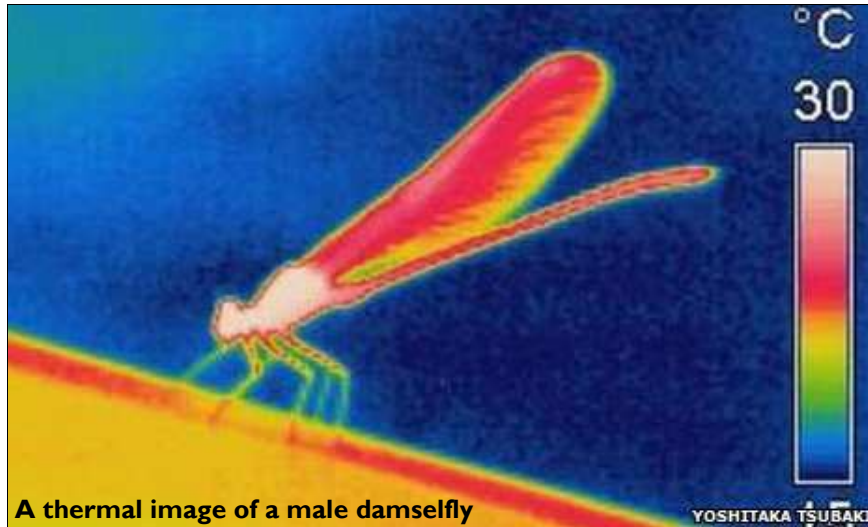


## Sussex Dragonfly Society Newsletter

# Dragonflies are Hot Stuff!

## Female damselflies prefer hot males, scientists have revealed

Male damselflies perform elaborate courtship displays, attracting females with high-speed flying manoeuvres. Now a new imaging study can reveal that males that warm their bodies by flying in the sun are indeed 'hot stuff' and attract more females. Hot-bodied males may benefit females by having access to the warmest territories, which in turn are optimal sites to lay eggs, the scientists say. The study is published in the journal *Behavioural Ecology and Sociobiology*.



### Hot shots

In a bid to attract females, some male damselflies perform intricate courtship displays, using specialised wings to fly at high speeds. This courtship display can indicate to females the quality of the male damselfly and potentially the quality of the territory he defends.

Now new filming techniques have helped reveal a previously unknown aspect to the mating behaviour of Japanese damselflies (*Mnais costalis*), that are endemic to Japan, living along fast-flowing mountain streams. "The key approach was to combine two technologies that have become cheap enough to use in the field," says Professor Michael Siva-Jothy from the University of Sheffield, UK who undertook the study with Professor Yoshitaka Tsubaki and Dr Yuka Samejima from Kyoto University, Shiga, Japan. The team used a thermal imaging camera to measure the body temperature of the insect while in flight. The camera was originally designed for use by the food industry. They also used a specialist high-speed digital camera which "was designed for elite sports coaches but it allows us to capture high speed images of behaviours that occur very rapidly and unpredictably," says Prof Siva-Jothy.

### On heat

Using these techniques they discovered that hotter male damselflies get more mates. Males flying in warm spots of sunlight have enhanced courtship displays as they attain higher body temperatures for longer, enabling them to court more females. Previous research has found higher body temperature enhances flight performance in insects. The team also reveals that the fortunes of a male damselfly can change depending on the amount of sun it gets. "A female can change her preference for the same male depending on how hot he is. A 'wimp' can become a 'hunk' by sitting in the sun. And then become a 'wimp' again because his territory is in the shade," Prof Siva-Jothy explains. It seems females prefer hot males, as they must have access to the sunnier spots along a river. Eggs laid in these warmer spots may develop faster and have a higher survival rate. Mating with a male in a sunny patch may also allow a female to stay warm while laying her eggs in the cold water. That will increase her ability to escape from predators and other male damselflies. Hotter males may also be better at defending their mates, say the researchers. They hope to learn more details about the behaviour, including how common it is among other damselflies.

By Jody Bourton Earth News reporter

# Movers and Shakers

Dragonflies are set to join the likes of Monarch Butterflies, Humpback Whales and Leatherback Turtles for their ability to migrate thousands of miles every year to find habitat and mates. In February this year, the National Geographic Magazine published an article about the epic journey which they start every October. Millions of dragonflies, mostly of the species known as the globe skimmer begin to arrive in the Maldives, more than 300 miles southwest of India, and yet by the year's end they have disappeared, only to reappear briefly in May. For a long time, scientists have been wondering where they come from and where they are headed.

Charles Anderson, a Maldives based biologist has 14 years of dragonfly data and an intriguing theory about this mysterious phenomenon. The insects, which breed in pools of fresh water, appear to be following the seasonal rains and monsoon. Each autumn, the path of the rains takes them from India to East Africa via the Maldives, and brings them back on a similar route months later. It's a round trip of about 11,000 miles, which, if proved right, could be the longest known migration of any insect, and one of the longest migrations of any species in the world.

Dragonflies may not be one of the first species you think of as the world's most globe-trotting species, but they may well prove themselves worthy of note in the Guinness book of animal migrations! Other species which give the Globe Skimmer a run for its money include :-

Monarch Butterfly — 4,300 miles  
Humpback Whale — 5,100 miles  
Leatherback Turtle - 12,700 miles  
Sooty Shearwater — 40,000 miles

Something to think about when we feeble humans board our next flight to a holiday destination perhaps!?



**The Humpback Whale (above right and below) is known to migrate around 5,000 a year for food and mating. Humpback Whale Images © Carol Farmer-Wright**



# Cambodian Dragons

Following our spring-time article about Cambodian dragonflies, a local dragonfly expert was kind enough to contact us and identify some of the dragonflies seen in the photos. So for those of you planning a South East Asian trip in the near future, here is some updated information.

The lovely red dragonfly with the 'red wings' is a Male '*Neurothemis fulvia*' (Russet Percher)



The red bodied dragonfly below is likely to be *Orthetrum testaceum* or *chrysis*



The dragonfly with the amber wing patches to the left is probably *Brachythemis contaminata*

This grey-blue coastal dragonfly below is *Diplacodes trivialis*



And the yellower dragonfly above is Probably the female of the same species.

## Continued . . . . .

The yellow dragonfly on the right is a female '*Sympetrum*' but exact identification of this species is not possible from the photo.



The black and yellow dragon (left) is one of the *Themis* species



The beautiful violet-pink dragonfly (left) is a male '*Trithemis aurora*'

And the blue dragon (right) with the black wing-tips is '*Diplacodes nebulosa*'.



Sincere thanks to Damian Pinguey who took the time to identify all these species for us. If anyone else has any other South-East Asian photos that they wish to have identified then Damian has kindly offered to accept emailed pictures to [Damian.Pinguey@fly.virgin.com](mailto:Damian.Pinguey@fly.virgin.com), or downloads to his or other Flickr websites ([www.flickr.com/photos/rezamink](http://www.flickr.com/photos/rezamink))

# 2009 Record Review

by Penny Green

A huge thank you to all of you who sent your Odonata records in for 2009; this data has been well-used already by the organisations and individuals that contact the Sussex Biodiversity Record Centre. Amongst other things, your records will have helped with important decision-making and management of nature reserves.

Unfortunately, so far we haven't received as many records for 2009 as we did for 2008, but we like to say that recording is more about quality rather than quantity! In 2009 we received 1,818 records (down to species level) and in 2008 we received 3,187. There may be some records that we haven't received yet – so if you haven't yet sent your records in please send them to

[pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk).

Species name	2009	2008
Azure Damselfly	147	298
Banded Demoiselle	51	61
Beautiful Demoiselle	79	97
Black Darter	6	28
Black-tailed Skimmer	74	112
Blue-tailed Damselfly	140	243
Brilliant Emerald	34	28
Broad-bodied Chaser	111	220
Brown Hawker	100	109
Common Blue Damselfly	74	110
Club-tailed Dragonfly	4	2
Common Darter	177	291
Downy Emerald	37	87
Emerald Damselfly	13	18
Emperor Dragonfly	86	169
Four-spotted Chaser	33	80
Golden-ringed Dragonfly	16	31
Hairy Dragonfly	50	98
Keeled Skimmer	9	15
Large Red Damselfly	127	273
Migrant Hawker	89	210
Red-eyed Damselfly	47	84
Red-veined Darter	0	1
Ruddy Darter	63	106
Scarce Chaser	26	75
Small Red Damselfly	2	11
Small Red-eyed Damselfly	16	15
Southern Hawker	118	149
Variable Damselfly	6	37
White-legged Damselfly	83	87
<b>Grand Total</b>	<b>1818</b>	<b>3187</b>

As you can see in the summary table the number of records for some species are really down – some by 50% or more. For example the Azure Damselfly, Broad-bodied Chaser, Black Darter, Downy Emerald, Emperor Dragonfly and Four-spotted Chaser. Not many species have seen a rise in the number of records from 2008. Whether this is partially due to the long snowy spell and the late start in the dragonfly season is unsure?

Interestingly, Brilliant Emerald has been recorded more in 2009, perhaps from the people that came along to the Warnham field trip last year where we had excellent views of both Brilliant and Downy Emerald, so they then had the confidence to identify them?!

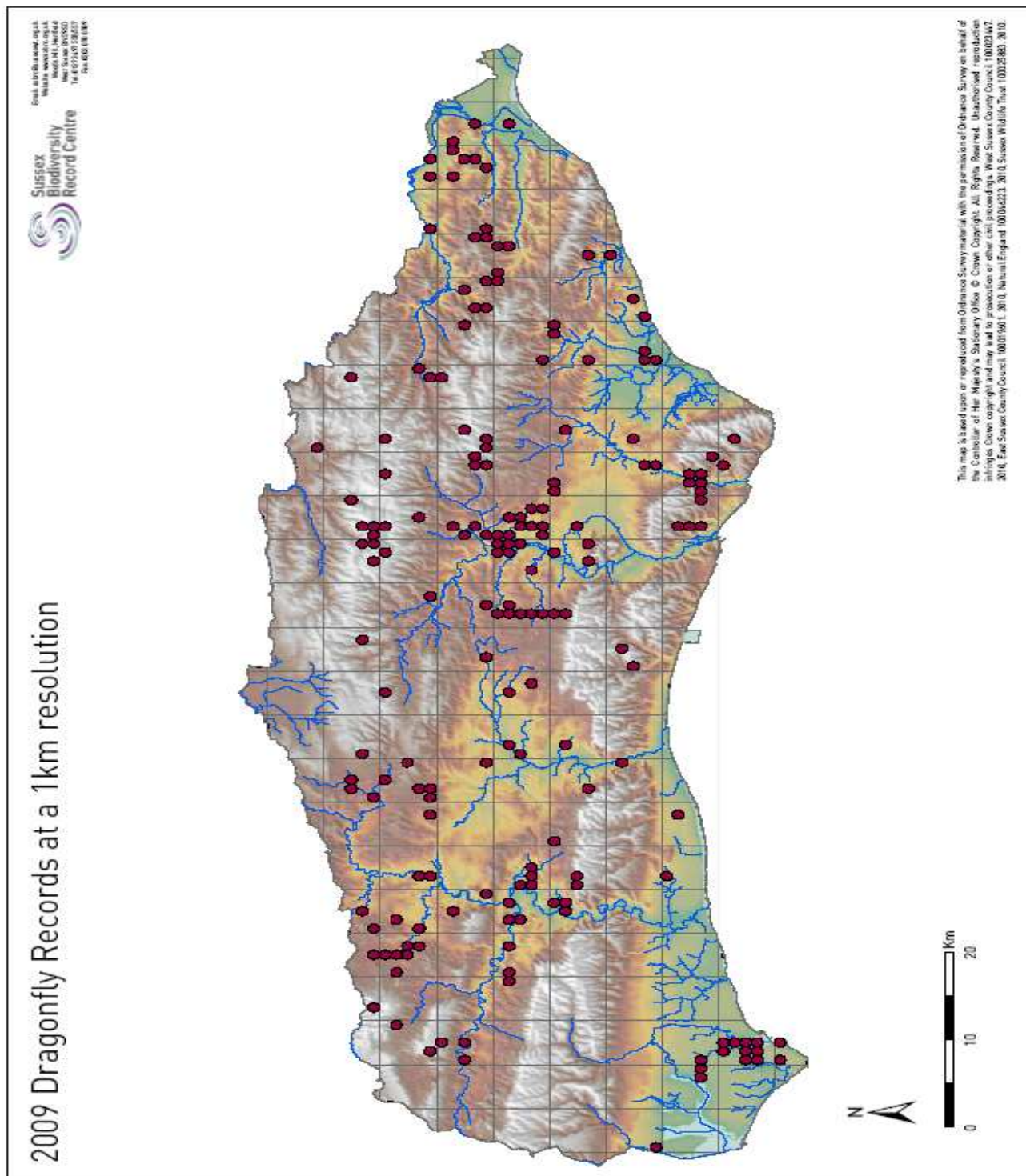
Scarce Chaser records were down in 2009 compared to a healthy total in 2008. You may remember John Luck's articles in both the autumn 2009 and spring 2010 newsletters, where he talks about the unrelenting visits that he makes to the River Ouse throughout 2009 knowing that there were good numbers of Scarce Chaser in 2008. But none were found until a larva search in the spring of 2010, and one of John's thoughts on this was that they are on a two year cycle. This may explain the drop in records for this species – it wasn't from a lack of trying that's for sure!

As in 2008, the records are well-spread over Sussex (as you can see on the map on the following page); the main areas of recording activity were Pagham Harbour, Wiggonholt Common RSPB reserve, Southwater Country Park and quarry, Southwater LNR and Chesworth Farm, Leechpool and Owlbeech Woods, SWT's Woods Mill nature reserve, Plumpton Pond, Isfield Place and Constantia Manor, Uckfield Golf Course and Moorlands at Friar's Gate, and Ashburnham Place to name but a few!

## Continued .....

If we have a day out looking for dragonflies or wildlife, we tend visit to places where we know we will see some of the rarer species that are more habitat or site specific. So the bulk of records tend to come from the same places, usually nature reserves. In 2011 it would be great to get records in from less well-known areas. We'll publish a map in the spring newsletter to help pin-point the areas that we don't have many Odonata records for, and this will help focus recording effort for us all!

If you'd like to brush up on your identification skills then people of all abilities are welcomed along on our field trips. The leaders are excellent at teaching what features you should be looking for when identifying species, and they help you to learn the differences between similar looking species. This will arm you with the skills you need to go out in to new areas and find your own dragonfly hotspots! Please help make it a record-breaking year in 2010 by sending your records in to [penny-green@sussexwt.org.uk](mailto:penny-green@sussexwt.org.uk) ! Thank you.



# Woods Mill

## A rich and vibrant tapestry

by Steve Tillman

If you were to ask me what my favourite nature reserve was I would have to say that in the spring and early summer it is Woods Mill at Henfield, which has a vibrant and varied range of habitats combined with easy public access. Within its boundary one can see ancient woodland, ancient hedgerows and scrub, meadows, ponds, lake and wetlands. It is a microcosm of the wider surrounding countryside showcasing many semi-natural habitats.



Three years ago, the Wildlife Trust acquired an area of old floodplain and farmland directly adjoining Woods Mill. This area includes improved and semi-improved grassland, wetland, river and a length of the old Woods Mill leat. This area has a very different feel to the original reserve, offering open views of the South Downs and the wider countryside, and an active river floodplain.

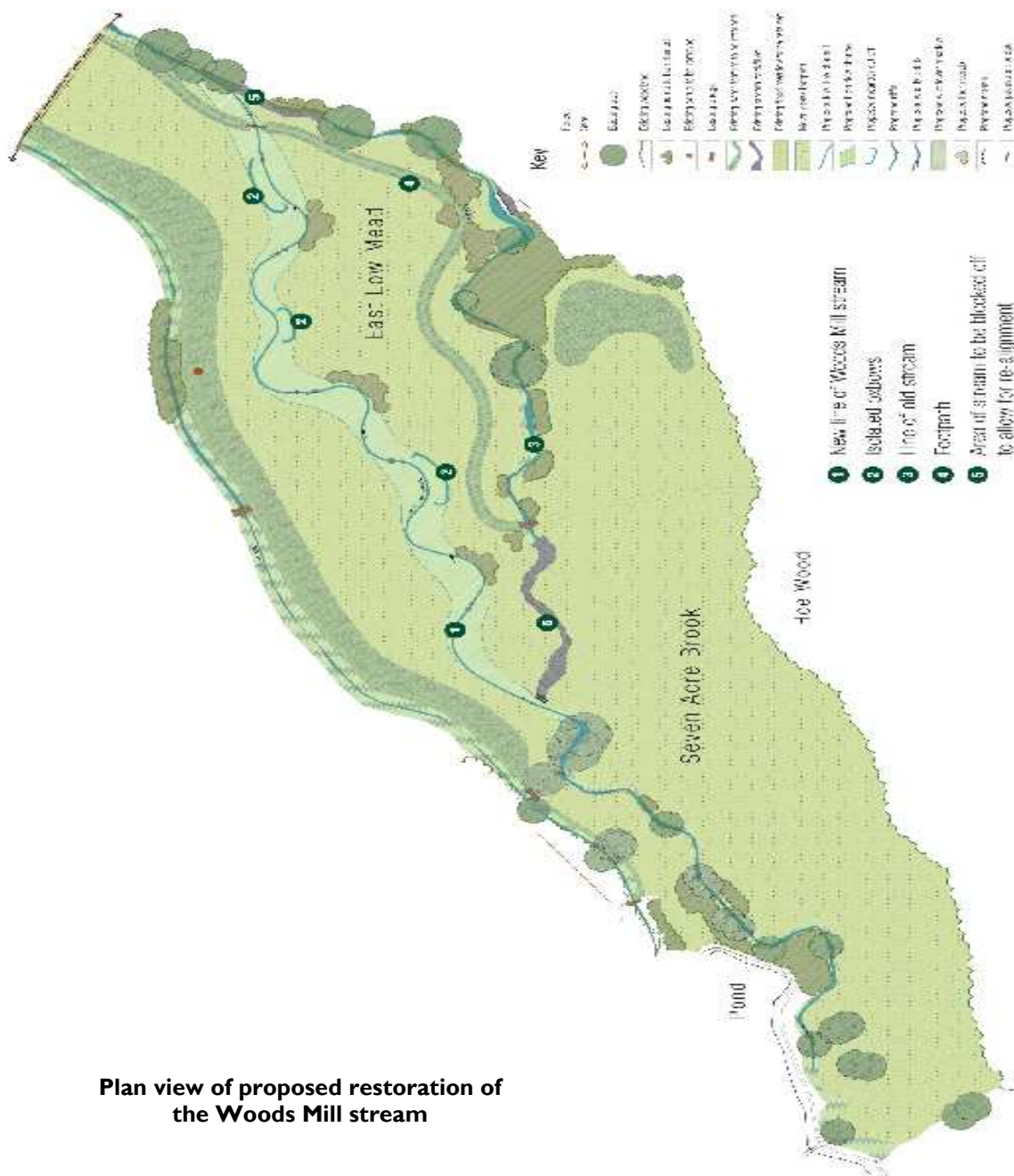
The land lends itself beautifully to habitat restoration and wildlife enhancement. So, in partnership with the Environment Agency, we have been looking at ways in which we can reconnect the once natural floodplain with the river which has been straightened, deepened and much modified over the years. This exciting project will see a section of the Woods Mill stream restored to a fully functioning river system fully reconnected with its floodplain, benefiting many species of invertebrate such as dragonfly and damselfly including Beautiful Demoiselle. Birds such as Snipe and Kingfisher and Sedge Warbler should also thrive in this newly created riverine habitat. The work to the river-bed will enable migratory fish such as Sea Trout and Eel to have suitable areas to spawn.

Its design will be created to fit as naturally as possible with the original natural floodplain, with gentle meanders, shallows and riffles and isolated oxbows of static water for those species which thrive better in still water. Over the winter months high water flows will overwhelm the surrounding fields of the nature reserve creating valuable grazing marsh which our cattle will graze off over the summer period. This flooding will not affect any other landowner but provide valuable habitat for wintering wildfowl and wetland birds.

**Continued . . . . .**

The line of the old river will become a backwater left to naturally fill up. It will become a long thin pond which will very quickly become inhabited with pond creatures and amphibians. Existing scrub will be allowed to fill out and thicken benefiting bird species including Cetti's Warbler and Nightingale. The scrub will link to habitats such as our woodland (Hoe Wood) creating corridors for small mammals and flight lines for bats.

Once completed, we will have even greater habitat diversity on site further enhancing everyone's enjoyment of their visit but also increasing the wildlife value of the wider landscape. Visitors will be able to walk around this new landscape (when it is not flooded) watching the river course develop and change into a new valuable wetland habitat or look out over the flooded areas from viewing platforms – showcasing a naturally flooding wetland and all its wildlife to all who venture in for a visit.



# Beautiful 'lost' insect returns to UK

by **Richard Black, Environment correspondent, BBC**

A delicate, blue-hued insect has re-appeared in the UK after an interval of more than half a century. The Dainty Damselfly, a smaller relative of dragonflies, was washed away from its single East Anglian pond in 1952/3. Now, a few individuals have been found at a site in north Kent. Conservationists believe the insects were blown on the wind from France or Belgium where they have become more common, probably due to climate change.

"It's most likely that they've come in from the continent," said Dave Smallshire, convenor of the BDS Dragonfly Conservation Group. "The spread northwards across the continent seems to be associated with climate change. "And it's quite likely that they've caught a lift on a southerly breeze and popped across the English Channel."



## Breeding question

There are 17 damselfly species that breed in the UK. One, the Small Red-eyed Damselfly, which first appeared in 1999, is also thought to be a consequence of rising temperatures. It now breeds across tracts of south-east England.

Whether the Dainty Damselfly can form a stable breeding population is not yet clear. "What we need to do is follow up this year's observations with some more intensive survey work next year," said Dr Smallshire. "They may be able to breed from egg through to adult in one year. "So next year we would be looking for the exuvia - the discarded larval casing - and that would be evidence that they have bred successfully in Britain."



# National News



## Extinct Damselfly re-discovered after fifty seven years

The delicate blue Dainty Damselfly had been declared extinct after coastal defences were breached during a the great floods which wiped out the last remaining populations in East Anglia in 1953. However, after a long absence, recent sightings of four adults in North Kent made by Gill and John Brooks have been verified by the British Dragonfly Society.



Male Dainty Damselfly



Female Dainty Damselfly

As its name suggests, the Dainty Damselfly is both small and delicate. Both the males and females have blue and black markings with yellow undersides. Males have a characteristic 'wine goblet' marking just below their wings and females have black 'rocket' shapes up their bodies, very similar to other blue damselfly species found in Britain.

On the Continent, Dainty Damselfly has a predominantly central and southern distribution, though there have been signs of a northerly expansion of the species' range. The re-appearance of Dainty Damselfly in Britain is highly significant. These events, which for Britain's dragonfly fauna are pretty much unprecedented, are thought likely to be a consequence of ongoing climate change.

## "British Dragonflies" 2nd edition

D Smallshire and A Swash have produced a revised edition of this comprehensive photographic field guide to dragonflies and damselflies of Britain and Ireland. This completely revised second edition covers in detail the identification all 56 species that have been recorded, as well as seven potential vagrants.

The guide is available from the [BDS Shop](#) at £17.95 (plus £2.00 p&p)



of



## Cumbria hosts first UK re-introduction of the White-faced Darter dragonfly

Cumbria Wildlife Trust is reintroducing the rare White-faced Darter dragonfly onto a lowland raised bog in north Cumbria. This first attempt to reintroduce the White-faced Darter dragonfly in the UK is being funded by Natural England.

The Trust is working with the British Dragonfly Society to secure the long-term future of this now rare species, which is currently found on less than 10 sites in England. The reintroduction will help to prevent the dragonfly's extinction in Cumbria and provide the Trust with an exciting 'flagship' Biodiversity Action Plan species on one of its key nature reserves. It will also provide opportunities for interpreting dragonfly behaviour and conservation to a wide range of audiences.

The first of three annual phases of the reintroduction is being carried out in June. Buckets of the Sphagnum Moss amongst which the larvae of the White-faced Darter live, have been collected from a donor site in north Cumbria. This 'mix' will contain eggs and two generations of larvae of the White-faced Darter. It is hoped that this will result in the insects appearing on the wing in spring 2011, and then each year thereafter, and colonising the myriad of pools found on the site.



## 27th Annual Meeting of BDS on 23rd October 2010 Harper Adams University College, Shropshire

*Arranged by Dr. Dorothy Gennard*

This year's National BDS meeting included talks on the following subjects:-

Portuguese Adventure: Overview of First European Conference on Odonatology 2010

The Ischnura puzzle: Review of the distribution of Odonata in the Macaronesian archipelagos

Dragonflies in Focus - a few highlights - *Stephen Prentice*

Damselflies and dragons - *Peter Allen*

Larval habitats - *James Coulter*

Keeping tracks on dragonflies - *Wendy Harris*

For more information please contact the British Dragonfly Society



# Local News



## Rye Red Veined News

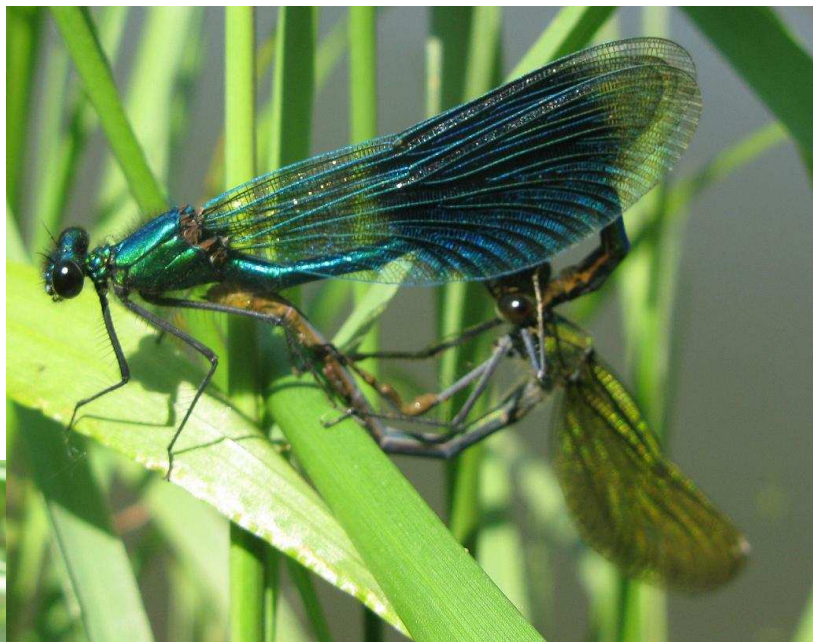
Sadly nothing to report on the Rye Red-veins this year. Sampling for larvae in late April early May produced nothing and searches for exuviae in late May and all of June also produced nothing. I think it was unlikely that any larvae could have survived the winter we had, and sadly the ponds are probably no longer attractive for this species as the emergent vegetation increases and starts to encroach further. On a positive note there are plans to create many new ponds on Harbour Farm and Possibly Castle Water. The Downy Emerald colony at Castle Water did well this year, I found 19 exuviae during early May from just one spot that can be reached easily, I hope this species continues to do well here — its been a fantastic addition to the our breeding dragonflies.

Sam Smith

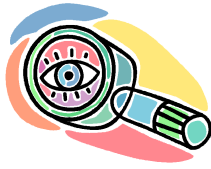


## Mating Banded Demoiselles - Caught on Camera

This amorous pair were caught on film by John Luck.



This is a hard species to photograph mating and so we thought we would share this snapshot of them clasping with you.



# EYE — D Corner No 7

## Identifying Golden-ringed Dragonflies

To the untrained eye, the Golden-ringed Dragonfly might be mistaken for a large tropical wasp. With yellow bands across its black body, it is certainly distinctive in appearance but also habitat. Read on to find out the key features to identify the horse-stinger!

The Golden-ringed Dragonfly, *Cordulegaster boltonii*, is the only member of its family in Britain. In Sussex, the larvae habitat is small heathland streams, so it will always be a scarce and local species.

### Where to look:

Heathland and open woodland streams

### When to look:

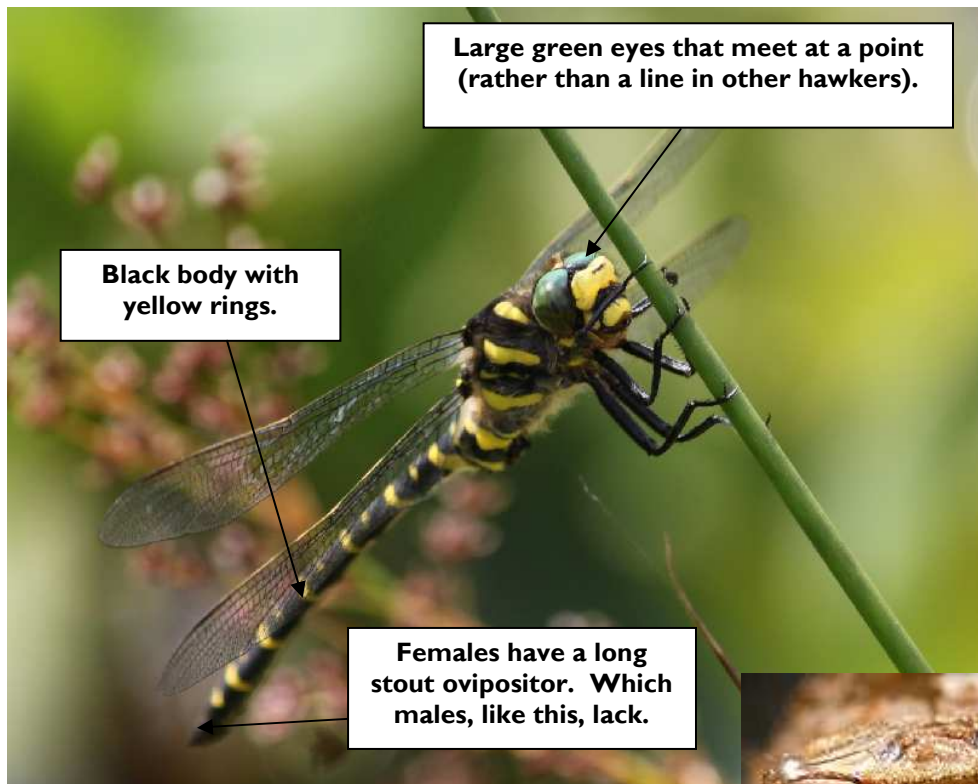
**Adults** – On the wing from the end of May until September.

**Exuviae** – Found on bankside vegetation from the end of May to early August.

**Larvae** – All year round in gravel or silt-bottomed heathland streams.

### What to look for:

(Below) Male Golden-ringed Dragonfly perched on bankside vegetation.



(Right) A face only a mother could love? Golden-ringed Dragonfly exuviae have large irregular intermeshing 'teeth' unlike other UK species.



# Field Trips 2010

## Across the Border

North Kent Field Trip – 17<sup>th</sup> July 2010

More of a connoisseur's event this, after my original idea of a field trip on the border of our two counties became a visit to study the differences between the Emerald Damselfly *Lestes sponsa* and Scarce Emerald Damselfly *Lestes dryas*. Back in the 1940s, this National Rarity was resident in Sussex, but no longer. The Thames Basin does, however, provide its preferred habitat of brackish ditches with extensive emergent vegetation. Thus, the small contingent from Sussex (just the 4 of us) were soon being whisked down the road by our hosts, Gill and John Brook.

Chalk Marshes was the first site which was alive with Scarce Emeralds. John adeptly netted a male and the subtle differences between this individual and its common cousin were seen at close quarters. We noted that the pruinose area did not cover the lower third of Segment 2, the eyes appeared to be a brighter blue (Picture right) and the anal appendages were incurved (Picture below left).



A female was then netted so that we could see the long ovipositor (below).



Now was there a sample of the Common Emerald to compare to? No, there wasn't. Not a single one.



Ruddy Darters were everywhere, remarkably egg-laying on bare ground some distance from the ditches. Total number of species for Chalk was 6, including Blue-tailed Damselfly, Emperor, Red-eyed Damselfly and finally a female Small Red-eyed Damselfly...a close up view highlighted the complete ante-humeral stripe and blue sides to the thorax (Picture, right).



## Continued . . . . .

“Do you get any hobbies over here?” asked Dave. “Not for a couple of years” said Mike. Seconds later 2 hobbies flew over. Amazing.

Onward to Cliffe Marshes for lunch and more of the same with 30+ Scarce Emeralds, Small Red-eyed Damselflies, males this time (Picture below),



Common Blue Damselflies, Black-tailed Skimmer, Emperor, Four-spotted Chaser, Azure Damselfly, Common Darter, more Ruddy Darters and Red-eyed Damselflies and then to our great delight the rare migrant, Southern Emerald Damselfly *Lestes barbarus* and then a second one.



John caught this very different Emerald species. The extensive yellow markings, bi-coloured pterostigma and diverging lower appendages were clear to see. Immediately upon release it disappeared into the long grass.



And so a long day in the field came to an end with a total of 12 species.

Again, perfect weather. Our sincere thanks to Gill and John for their hard work and delightful company.

**Photos: Copyright Gill Brook and John Luck.. Article: John Luck**

# **Arun Valley Amble**

## **River Arun / Wey & Arun Canal Field Trip**

### **12th June 2010**

To spend a summer's day strolling along one of the greatest river's in the South East for dragonflies could be regarded as a real treat. Doubling this up, with the pleasure of a second parallel "river" to explore (the Arun canal), provided a pretty unique experience on our River Arun amble. All this was enjoyed by over 20 BDS members and friends, who witnessed some great sights and many dragonflies over the day.

This was the first field trip of the season, blessed with fine weather and courtesy of the local land-owner who allowed us to access a stretch of the Wey & Arun Canal that is "invisible" to the public (screened by a thick hedge bordering the footpath), and also the river which rarely has a public path by the side of it. Alternately tracing the river and canal as we headed south, coupled with relatively benign farming practices bordering these river and canal ribbons, much of the land under conservation management through agri-environment agreements, it presented many quality habitats for investigating dragonflies.



The Wey and Arun Canal had its heyday in the early nineteenth century, before suffering the fate of this too slow industrial transport, being overtaken by the coming of the railway. Nearer the sea, the canal utilised the more mature river of the Lower Arun; higher up, because of the narrower, shallower and more winding river, canal bypasses were constructed, to provide a more direct (straighter - faster) route, creating a parallel watercourse alongside the River Arun. Although in some areas the building of the canal severely damaged some of the natural river habitats, in its current form it provides ideal habitats for dragonflies along its ponded and slow flowing reaches. You can visit the Wey & Arun Canal website for a map of the area and more information at <http://www.weyandarun.co.uk/wsmmap09.htm>

The trip began on private land which gave us the opportunity to gain new records of the status of the dragonfly fauna in this area. The early morning sun soon warmed the air and stirred the dragonfly fauna into action. Although some cloud, this was quite light and didn't really cause problems of insects skulking off to hide; there was also a cool wind noticeable at times, but much of the area was relatively sheltered, so this was no detractor.

## Continued . . . . .

As we progressed through the valley, we focused more on the river, as the canal was dried up or filled in for much of the next section. The river had quite steep-sided banks, with thick marginal vegetation in places that made it more difficult to survey the water. We continued south, until we reached Orfold aqueduct and lock (Lordings Lock on OS maps, TQ058245), with lots of accessible canal, pond and river waters. For a varied round trip, we headed east, across country, re-joining the River Arun at the Guildenhurst Bridge to finish.

Though we only saw 12 species, this was quality and abundant viewing. We saw lots of tandem pairs, copulating and egg-laying; observed the change of species composition as we moved from flowing river to still-water; had some close-ups of the elusive Brilliant Emerald; and were never far from a great deal of dragonfly activity.



Brown Hawker © B Rainbow

A further seven species recorded from this area, not seen on the day: White-legged Damselfly *Platycnemis pennipes*, Migrant Hawker *Aeshna mixta*, Southern Hawker *Aeshna cyanea*, Brown Hawker *Aeshna grandis*, Club-tailed Dragonfly *Gomphus vulgatissimus*, Downy Emerald *Cordulia aenea*, Ruddy Darter *Sympetrum sanguineum*.

I handed out a simple map (right), which makes interesting reading. It shows the number of dragonfly records by one kilometre square. The grid square where we started our trip has 209 records, but the squares to the east and west, have just one and no records respectively! That should inspire you for the 2011 season to go out surveying in Sussex and, equally importantly, to send in your records.



Red-eyed Damselfly © B Rainbow

Phil Belden

# High Weald Wanderings

Nymans Field Trip - 11<sup>th</sup> July 2010

Another glorious day heralded our visit to Nymans Gardens, where 15 Dragonfly group members were met by National Trust warden, Chloe Bradbrooke, who guided us around the reserve.



The property boasts a fine array of varied habitat. Being on the edge of the High Weald, it is still surprisingly steep terrain and many of us were going to realise that they had been on a mini fell walk by the end of the day.

Our first port of call was the newly created Arboretum dipping pond, sited on the field above the woodland. The bare crater of last August had been turned into a thriving wetland area in the middle of which was a superb giant dragonfly carved out of oak.



Here we were able to note the anticipated pioneer species: Emperor, Broad-bodied Chaser, Azure Damselfly, Blue-tailed Damselfly and Common Blue Damselfly. The Emperor, in fact, was an ovipositing female. So come late May, either next year or the year after, newly emerging Emperors will be taking off shortly after breakfast time. On a nearby bramble bush were a further 3 Broad-bodied Chasers.

We headed down into the extensive woodland area, which included the tallest tree in Sussex, a Giant Redwood *Sequoia wellingtonia*. Onward into the delightful woodland ride, which was alive with Silver-washed Fritillaries and White Admirals. There we saw Beautiful Demoiselle, Ruddy Darter and Large Red Damselfly.



## Continued . . . . .

Along the boardwalk a perched Brown Hawker provided good views followed briefly by a Golden-ringed Dragonfly.

We continued to the lake for lunch, which gave us the opportunity of watching a Downy Emerald patrolling the water's edge immediately in front of us.

Thereafter, we walked through the wild-flower meadow and back into the woodland to follow a series of ghylls, producing sightings of Brilliant Emerald, Southern Hawker and Kingfisher.

Finally past the woodman's cottage where the group were mesmerised by a close encounter with a Southern Hawker, which weaved its way between us just a few inches away.



Nearby several Silver-washed Fritillaries glided along on the woodland edge, whilst Brown Hawkers lanced through the air.

Chloe explained the sterling work being performed by her band of volunteers and we saw further results of the oak carvings of the craftsmen from Yorkshire, who were down for a week to ply their truly remarkable skills. Thus finished a really enjoyable field trip producing a total of 13 species. Our sincere thanks to our hosts, the National Trust.

John Luck 19<sup>th</sup> September 2010

**Photos (Copyright):**

**Barbara Allen: Ovipositing female Emperor & Brown Hawker; Sandra Solly: Male Broad-bodied Chaser; John Luck: others.**

# Golden-ringed Dragonflies, Brilliant Emeralds and Cream Teas

**Ashdown Forest Field Trip – 25<sup>th</sup> July 2010**

Had we advertised the field trip as above, can you imagine how many people would have turned up? So you have to either keep the faith or read the sub-text. Not wishing to waste this wonderful summer weather, I felt an additional field trip was obligatory this summer and where better than the Ashdown Forest. Nineteen members agreed and an early start soon found us gazing into a black pool waiting for the clouds to disperse. The sun was playing hide and seek initially, but occasionally appeared, allowing us to locate 8 species: Azure Damselfly, Keeled Skimmer, Small Red Damselfly, Golden-ringed Dragonfly, Broad-bodied Chaser, Large Red Damselfly, Common Blue Damselfly & Common Darter.



Small Red Damselfly © B Allen



Golden-ringed Dragonfly © B Allen

Lunch was taken watching Golden-ringed Dragonflies plus our 9<sup>th</sup> species, a Brown Hawker.

Onward then to Moorlands to meet our hosts Mr and Mrs Love, who showed us around their quite remarkable 7 acre wildlife reserve. The weather had by now upped the ante to something nearer tropical and the dragonflies were revelling in the conditions. 4 Brilliant Emeralds were flying around one of the small ponds, which had the classic background of pine trees, but little evidence of any overhanging bushes. Stunning views were had a mere foot away ....a further 2 or 3 were seen at the other pools. See photo (right).

Brown Hawker, Common Darter, Small Red Damselfly and Golden-ringed Dragonfly were again seen and new species for the day of: Emperor Dragonfly, Ruddy Darter, Blue-tailed Damselfly, Red-eyed Damselfly, White-legged Damselfly & Southern Hawker, making a grand total for the day of 15 species.



## Continued . . . . .

And so a happy bunch of dragonfly spotters made their way over the croquet lawn to partake of cream teas served by our generous hosts, Lucy & Mark Love. Wives and girl-friends attending one of our field trips for the first time took some convincing that this was not the normal occurrence.



No. This is most certainly the first time we have been served cream teas on one of our field trips. It brought a wonderful day to a most fitting conclusion.

John Luck

**Photos: Small Red Damselfly, Golden-ringed Dragonfly, Brilliant Emerald (Barbara Allen); Group in garden and 'taking a well earned rest — below (John Luck)**



# Meet the Committee . .

## And one of its founder members, Dave Sadler

Hi, I'm Dave Sadler, current Treasurer of the Group.

I have been interested in many aspects of Natural History from an early age, and took up birdwatching in the late 1960's. The 1970's were a barren time nature-wise, for me, as my weekends were spent playing sport. In 1979 the shift pattern of my new job allowed more spare time for some serious birding, and in the summer months, my attention turned to butterflies and then dragonflies.

The latter soon took precedence and I became a member of the original committee of the local Sussex Dragonfly Group, formed of like-minded individuals with the aim of producing an up-to-date atlas of Sussex dragonflies. The formation of this group eventually led to the publication of 'The Dragonflies of Sussex' in 2004 — a fantastic book with many interesting facts and photos. The proceeds from the sale of the book help to fund conservation work for dragonflies across Sussex.

I have a particular fondness for the Emerald dragonflies. We are lucky to have good populations of 2 of the 3 British species of these in Sussex. I wonder if the Orange-spotted Emerald will ever return to these shores in these exciting times of migrations and colonisations of Odonata from the Continent?

I have always enjoyed taking wildlife photographs and have accumulated a large collection of slides and, recently, digital images of dragonflies and other subjects. Many of my photographs were used in 'The Dragonflies of Sussex' and some in 'Britain's Dragonflies' - both highly recommended for the bookshelves of fellow dragonfly enthusiasts!"



# First and Last

This season we thought we would contact the National Dragonfly Group for their earliest sightings of dragonflies, just to see where Sussex stood with regards to early emergences. As you can see below, we have the UK's earliest sighting so far this year of records sent in of both Azure Damselfly and Black-tailed Skimmer.

## Sussex 'First' Sightings

Beautiful Demoiselle:	14-May-10 (Red Bridge, E. Sussex; S. Dawson) 2nd earliest nationally
Azure Damselfly:	8-Apr-10 (Old Shoreham, W. Sussex; A. Horton) - earliest nationally
Variable Damselfly:	1-May-10 (R. Ouse, E. Sussex; S. Dawson) - 2nd earliest nationally
Large Red Damselfly:	11-Apr-10 (Shoreham, W. Sussex; A. Horton) - 2nd earliest nationally
Blue-tailed Damselfly:	27-Apr-10 (Rye Harbour, E. Sussex; S. Smith) - joint earliest nationally
Hairy Dragonfly:	26-Apr-10 (Rye Harbour, E. Sussex; S. Smith) - joint earliest nationally
Golden-ringed Dragonfly:	4-Jun-10 (Burton Mill, W. Sussex; S. Darlington) - joint 2nd earliest
Black-tailed Skimmer:	21-May-10 (R. Cuckmere, E. Sussex; S. Dawson) - earliest nationally

## UK 'Firsts'

Species	First Date	Locality	Observer
Banded Demoiselle	1 May 10	Warwickshire	C. & M. Maughan
Beautiful Demoiselle	7 May 10	Berkshire	K. Lugg
Scarce Emerald Damselfly	3 June 10	Norfolk	A. Riley
Emerald Damselfly	23 May 10	Warwickshire	R. Harbird
Willow Emerald Damselfly	9 July 10	Suffolk	N. Mason
Irish Damselfly	25 May 10	Co. Tyrone	I. Rippey
Southern Damselfly	19 May 10	Hampshire	D. Jenkins
<b>Azure Damselfly</b>	<b>8 April 10</b>	<b>West Sussex</b>	<b>A. Horton</b>
Variable Damselfly	28 April 10	Kent	B. Lewis
Red-eyed Damselfly	3 May 10	Somerset	Anon
Small Red-eyed Damselfly	2 June 10	Lincolnshire	E. Mackrill
Large Red Damselfly	10 April 10	Essex	DMo
Common Blue Damselfly	4 May 10	Cheshire/Bucks.	B. Roberts/T. Wood
<b>Blue-tailed Damselfly</b>	<b>27 April 10</b>	<b>Northants./Wilts./E. Sussex</b>	<b>P. Mellows/S. Covey/S. Smith</b>
Scarce Blue-tailed Damselfly	23 May 10	Warwickshire	J. Bowley
Small Red Damselfly	4 June 10	Hampshire	C. Hall
White-legged Damselfly	15 May 10	Kent	T. Dove
Southern Hawker	26 May 10	Powys	K. Noble
Brown Hawker	15 June 10	Leicestershire	L. Ellison
Norfolk Hawker	23 May 10	Norfolk	via T. Needham
Common Hawker	17 June 10	Co. Armagh	I. Rippey
Migrant Hawker	27 June 10	Cheshire	P. Hill
Emperor Dragonfly	8 May 10	Cheshire	M. Bingham
<b>Hairy Dragonfly</b>	<b>26 April 10</b>	<b>East Sussex/Kent</b>	<b>S. Smith/SBBOT</b>
Club-tailed Dragonfly	4 May 10	Berkshire	C. Webster
Golden-ringed Dragonfly	28 May 10	Hampshire	via P. Winter
Downy Emerald	29 April 10	Kent	T. Dove
Brilliant Emerald	4 June 10	Surrey	R. O'Mahony
White-faced Darter	22 May 10	Staffordshire	J. Hague
Broad-bodied Chaser	27 April 10	Devon/Hampshire	J. Baker/P. Ritchie/H. Laughton
Scarce Chaser	18 May 10	Gloucestershire	I. Twissell
Four-spotted Chaser	23 April 10	Dorset	D. McCloskey & A. Brown
<b>Black-tailed Skimmer</b>	<b>21 May 10</b>	<b>East Sussex</b>	<b>S. Dawson</b>
Keeled Skimmer	23 May 10	Cornwall/Hampshire/Norfolk	C. Moore/P. Ritchie/B. Dawson
Black Darter	25 June 10	Norfolk/Shropshire	J. Furse/Anon
Ruddy Darter	19 June 10	Dorset	Anon
Common Darter	4 June 10	Kent	B. Lewis

# New to Recording Dragonflies?

Here are 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 (preferably 6 — 10 figures)
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)



# Kids Corner

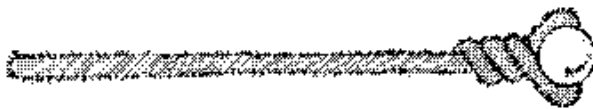
## Making a model dragonfly

(From Water Watch Activity Pack, The Wildlife Trusts)

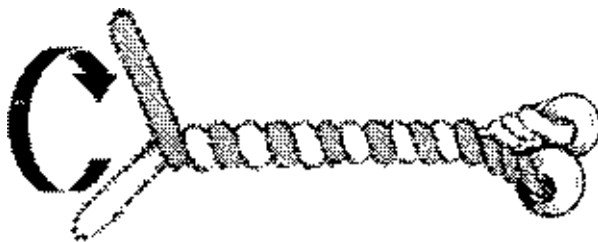
To make a dragonfly you will need:

- two 30cm lengths of strong, bendable wire,
- two long coloured pipe-cleaners,
- two medium-sized beads or buttons,
- and coloured cellophane (old sweet wrappers) or sellotape.

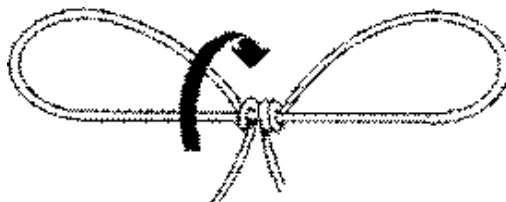
Try and produce some copies of real dragonfly species if you can find pictures. You can add your models to a wall mural showing the plants at the water's edge, or use them to make a mobile.



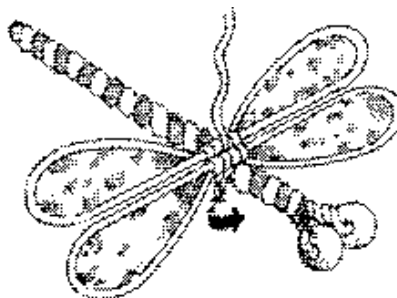
To attach the beads, thread them through each pipe cleaner and wrap the ends back on themselves.



To finish making the body, twist the pipe-cleaners together. The beads make the dragonfly's eyes.



Make two sets of wings by bending each piece of wire into a double set. Leave spare wire in the middle. Wrap each wing with cellophane or cover with sellotape and colour in with felt pens.



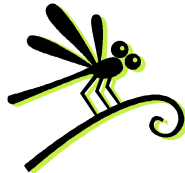
Wrap loose wire from the middle of wings firmly around the body, a quarter of the way along from the eyes to complete the dragonfly. Now have fun flying it around your imaginary pond!

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



## Questions. True or False?

- 1) Dragonflies can accelerate from a hovering stop to up to 90 mph in a few seconds.
- 2) The Lokota Indians believed that dragonflies had magical powers which helped them evade hailstones!
- 3) Some species of dragonfly are known to hibernate as adults
- 4) The female of a Small Red-eyed Damselfly has a complete antehumeral stripe and blue sides to its thorax
- 5) One fable suggest that dragonflies are faeries which can only be seen if primrose is rubbed on your eyelids!!
- 6) The Southern Damselfly often migrates no more than 200 metres in its whole lifetime
- 7) Some fishermen use hovering dragonflies to show where fish are plentiful
- 8) Hobbies can often be seen catching dragonflies in flight to eat
- 9) There are 25 damselfly species that breed in the UK
- 10) Golden-ringed Dragonflies are mostly found in chalk streams and ponds



## Welcomes, Thank Yous & Goodbyes

Many thanks to everyone who contributed to this year's newsletters.

Sincere thanks and goodbye to Graeme Lyons who has retired from his position of Recorder with the SDS. We thank him for all his hard work and he assures us he will carry on recording dragonflies for us whenever he can ! A warm welcome is extended to Jonathan Wood who recently joined the committee as our Conservation Advisor.

# 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 pennygreen@sussexwt.org.uk or c/o Penny Green, Sussex Wildlife Trust, Woods Mill, Henfield, BN5 9SD, and we'll keep you up to date with our newsletters.
6. Adopt a waterbody near you and report back to us on its dragon and damselfly fauna
7. Report the first and last times you see individual species in each year
8. Use less water! Simple as it sounds, if we use less water there is less pressure on our water resources and therefore on our wetlands that these amazing insects rely on.
9. Use eco products for washing clothes and washing up — they leave less damaging residues in our waste water and so help our winged friends by reducing pollution.
10. Look out for aliens! Not little green men, but plants: Parrot's Feather, 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) T, 2) T, 3) F, 4) T, 5) T, 6) T, 7) T, 8) T, 9) F, there are 17, 10) F — mostly found in heathlands and open woody streams.



**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)**



White-legged Damselfly © J Luck

# Contacts

## Core Group

Chairman: Phil Belden - Hobhouse, 47 Arundel Street, Brighton BN2 5TH  
Editor: Fran Southgate - [fransouthgate@sussexwt.org.uk](mailto:fransouthgate@sussexwt.org.uk)  
Sussex BRC: Penny Green - 01273 497521; [pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk)  
Website: Victoria Hume — please contact via Fran Southgate  
Press/Publicity: Ben Rainbow — [Ben.Rainbow@westsussex.gov.uk](mailto:Ben.Rainbow@westsussex.gov.uk)  
Conservation Advisor: Jonathan Wood — [jonwood555@hotmail.com](mailto:jonwood555@hotmail.com)

## Other useful Contacts

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

# Donations

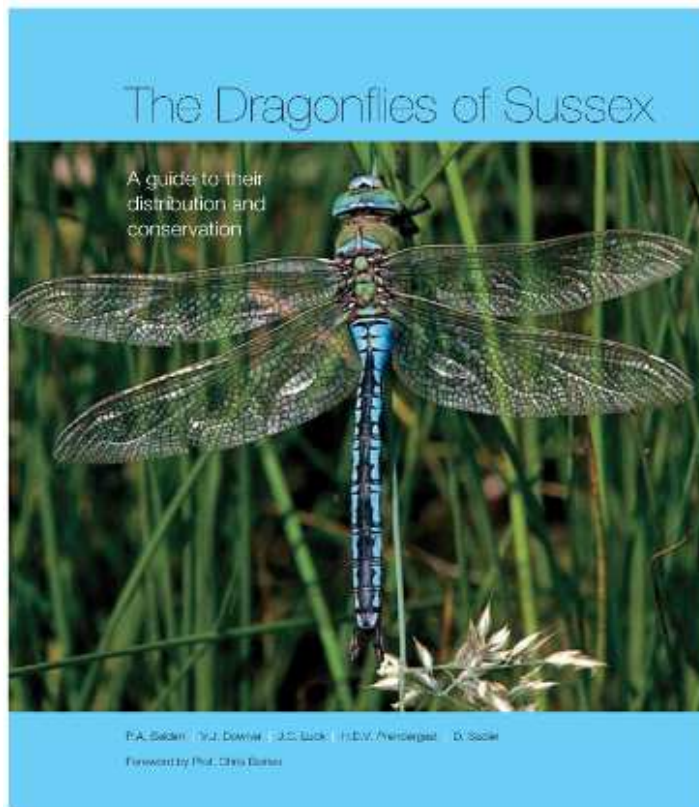
The Sussex Dragonfly Society is run exclusively with donations and proceeds from the sale of the Dragonflies of Sussex book.

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 Otters and Rivers Project, 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.

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

**NOW ONLY £5 or £7 including post & packaging,  
payable to 'Sussex Wildlife Trust'**

Proceeds go to dragonfly and wetland conservation

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

## Sussex Dragonfly Society Newsletter