British Dragonfly Society Sussex Group Newsletter

Spring 2017

No 38

BDS Clubtail Count 2017

This year, the British Dragonfly Society (BDS) are running a survey to collect records of the Common Clubtail called Clubtail Count 2017. As one of the 7 UK target areas is in the River Arun in West Sussex, it would be fantastic if you could all get your dragonfly spotting goggles on and help to put our local river on the map. Please help spread the news of this survey with your contacts.

The survey relies upon volunteers but they don't need prior experience of dragonfly recording as the BDS will send volunteers an ID guide as part of their volunteer pack. For more information or an ID guide go to www.british-dragonflies.org.uk/node/7138 or see the poster on the page below.

Male common club-tail dragonfly © D Sadler

Clubtail Count 2017

Join the quest for this elusive dragonfly

The Common Clubtail Dragonfly is a near threatened species restricted to a handful of unpolluted, slow flowing rivers in England and Wales. We desperately need to understand the population size and distribution of this dragonfly to conserve it, but records for this elusive species are patchy and dated.

We intend to change that.

We are calling on all nature lovers to join us in the search for this beautiful insect. No previous experience in dragonfly identification is needed, we will teach you all you need to know to find this local specialist.

You can give as much or as little time as you like, with all efforts making a valuable contribution to the conservation of a symbolic riverine dragonfly.

It is fun and simple: take action now!

If you live near the River Wye, Welsh Dee, Middle Thames, Kennet, Middle Severn or Sussex Arun get in touch with Project Co-ordinator, David Tompkins: david.tompkins@hotmail.co.uk or call our Conservation Officer, Genevieve Dalley, on: 02082256800

Visit www.british-dragonflies.org.uk for more information

BDS
British Dragonfly Society

The British Dragonfly Society is a registered charity, number 1168300

Looking for dragon's using eDNA ... is this the way forward?

Environmental DNA (eDNA) is nuclear or mitochondrial DNA that is released from an organism into the environment. Sources of eDNA include secreted faeces, mucous, gametes, shed skin, hair and carcasses. Recent research has shown that the DNA of a range of aquatic organisms can be detected in water samples at very low concentrations using qPCR (quantitative Polymerase Chain Reaction) methods.

In aquatic environments, eDNA is diluted and distributed in the water where it persists for 7–21 days, depending on the conditions. However, the DNA of organisms trapped in sediments can be preserved for thousands of years. Bearing in mind that many of our recording days are often foiled by foul weather, eDNA could therefore be a very useful technique for finding out which dragonfly and damselfly species are found in a local area, without having to be there when the sun shines.

Not only that, but the ability to look at the historic DNA of organisms found in wetland sediments could provide us with some extremely interesting findings around which species may have been present in the past. The fact that dragonfly and damselfly exuviae use these sediments for the majority of their life cycle means that the eDNA in sediment could yield some fascinating discoveries.

eDNA techniques are still evolving, and the technology for dragonfly and damselfly eDNA surveys is not yet widely available (or affordable), but watch this space, it's coming soon. In the interim, the Freshwater Habitats Trust have been trialling the use of eDNA to trace populations of England's Great Crested Newts (GCN) with some fascinating results. For more information see http://freshwaterhabitats.org.uk/projects/edna/weve-found-far/

National Recording of Dragonflies

As some of you may be aware, the National Biodiversity Network (NBN) Gateway was switched off at the end of March, and was replaced by a new platform, the NBN Atlas. Latest available information about this change is here: https://nbn.org.uk/news/nbn-atlas-update-march-2017/

A Sussex Dragonfly and Damselfly Records dataset was available on the NBN Gateways covering the period 1818 – 2008, available at 2 km resolution. Now the NBN Atlas has been launched, this dataset is theoretically no longer publicly accessible. However, the Sussex Biodiversity Record Centre (SxBRC) will continue to hold a copy in the County records.

The NBN Trust gave all data partners an option to transfer datasets directly from the NBN Gateway to the NBN Atlas. As things stand, SxBRC has decided not to take that option, because there has been very little information available about:

- legalities of applying Creative Commons licences, required by the new NBN Atlas platform
- how sensitive species will be dealt with
- how 'non-commercial use' licences will be interpreted and enforced

SxBRC decided they would rather wait until comprehensive guidance on these issues is available, and then make an informed decision about sharing data through the new NBN Atlas platform.

With regards to the Sussex Dragonfly and Damselfly datasets, much of the Sussex data is likely to be shared on the NBN Atlas as part of a British Dragonfly Society data, although SDS need to prevent duplication. It's not our intention to introduce restrictions on access to dragonfly data, but there are so many unknowns about the new NBN Atlas, we didn't want to sign away rights over the data – which comes from a variety of different sources – without fully understanding the possible implications. https://species.nbnatlas.org/species/NHMSYS0000841086

Districts for Dragonflies

In our spring newsletter last year, I outlined the distribution of Sussex's Odonata records with particular emphasis on areas for which there are no records. Since then we have had more than 3000 records added to the Sussex Biodiversity Record Centre's database. Quite a few of these records are historic transcriptions from old surveys and reports, and there have been many more contemporary records submitted to us. To get the competitive spring recording juices going between Sussex areas, I took a closer, more thorough look at these records* and, continuing the "empty squares" theme produced a league table of the 13 districts and boroughs in Sussex.

District	Area	No of records	Max Records in one square	No of species recorded	Empty Squares	% Empty	No of Recs Per Sq Km	% area	% of all records
Wealden	836.3	27102	2781	37	236	24.87	32.41	21.77	35.57
Chichester	814.1	9274	857	32	409	45.49	11.39	21.19	12.17
Horsham	531	13715	2415	33	240	39.34	25.83	13.82	18.00
Rother	518.3	13479	1427	35	151	25.00	26.01	13.49	17.69
Mid Sussex	334	3789	457	27	130	32.50	11.34	8.70	4.97
Lewes	294.4	4443	360	31	112	31.46	15.09	7.66	5.83
Arun	227.7	1374	324	27	130	45.77	6.03	5.93	1.80
Brighton	85.4	392	43	20	66	55.46	4.59	2.22	0.51
Adur & Worthing	78.52	340	92	23	56	53.85	4.33	2.04	0.45
Eastbourne Borough	45.5	418	142	22	26	41.27	9.19	1.18	0.55
Crawley Borough	45	1293	732	23	21	31.34	28.73	1.17	1.70
Hastings	30.8	564	227	22	12	24.00	18.31	0.80	0.74
All Sussex	**3841.02**	**76183**	**2781**	**44**	**1431**	**35.37**	**19.83**	**100.00**	**100.00**

Unsurprisingly, we have more records from Wealden District, (the largest Sussex District) than any other, as well as Sussex's most recorded square with 2781 records. More surprising is that Wealden also has the highest number of records per square kilometre – although admittedly it does have Ashdown Forest within its boundaries, and an SDS committee member! I think the surprises come from districts with fewer records. Take Mid Sussex for example. An area about 40% the size of Wealden has only 14% of the total Sussex records! Brighton can possibly be excused its lowly 4.59 records per square kilometre owing to a urban population and lack of fresh water, but Adur and Worthing has even fewer records (340 records at 4.33 per km^2) with significantly more potential dragonfly habitat.

We really want to see gaps being filled and every record you submit is valuable. By understanding the distribution of dragonflies and damselflies we can focus conservation effort more effectively and understand more clearly the results of these efforts. By using either iRecord (http://www.brc.ac.uk/iRecord) on your desktop computer or iRecord / Dragonfly apps on your smartphone the records get into the system as quickly as possible. Alternatively, send records directly to me, Bob Foreman at SxBRC. Please make sure you include a date, number seen, location name, OS grid reference, your name and any other relevant information (including photos if you have them). THANK YOU :) .*If numbers differ slightly from the last report it is because I only used records that have been identified to species, previously I looked at all records.

Natural Flood Management for Dragonflies

A huge thank you to the Freshwater Habitats Trust, East Sussex County Council's ranger Jo Heading and the Chailey Common Society volunteers, who joined Sussex Flow Initiative's Sandra Manning-Jones and Fran Southgate for a day of soggy bog digging on Chailey Common this spring. We spent the day digging up clumps of Molinia grass, and using them to block up old grip drains which were draining wet areas of the heath.

Not only will this help to reduce silt and flood run off from the heathland, thus helping the land to act as a sponge for floodwater for inhabitants downstream, but the added benefit of the work was the creation of a myriad of small scattered pools. These small pools create fantastic seasonal habitat for dragonflies, and we hope to see lots of them out on our newly re-wetted heathland, along with the return of some of the rare wet heathland plants like sundew and bog asphodel. Despite storm Doris and the stubbornness of the molinia we had a thoroughly pleasant day!

Dragonfly eyes see the world in ultra-multicolour

By Catherine Brahic . Image: Mitsuhiko Imamori/Minden Pictures

Their massive globular eyes should have been a clue, but it turns out as no surprise that dragonflies have souped-up colour vision that's better than anything ever seen in the animal world. We humans have what's known as tri-chromatic vision, which means we see colours as a combination of red, blue and green. This is thanks to three different types of light-sensitive proteins in our eyes, called opsins. We are not alone: di-, tri- and tetra-chromatic vision is de rigueur in the animal world, from mammals to birds and insects. There are however other species which completely outstrip us in the 'seeing in colour' stakes. Enter the dragonfly. A study of 12 dragonfly species has found that each one has no fewer than 11, and some a whopping 30, different visual opsins.

Ryo Futahashi of the National Institute of Advanced Industrial Science and Technology in Tsukuba, Japan, also found that dragonflies use different opsins at different ages. For instance, the larvae of some species that hatch in sand tend to lack blue opsins. "This is probably because blue light does not reach them easily," he says.

Do all those extra opsins mean dragonflies see the rainbow differently to us? Probably. Other studies have found that dragonflies can see ultraviolet on top of blue, green and red. And it is thought that they can recognise polarised light coming off reflective surfaces like water. "It's likely that they have much better colour discrimination than humans," says Futahashi.

Journal reference: PNAS, DOI: 10.1073/pnas.1424670112
www.newscientist.com/article/dn27015-dragonfly-eyes-see-the-world-in-ultra-multicolour/

Rewilding the River

In 2001 the Knepp Castle Estate started the transition from arable and dairy farming to a pioneering process-led conservation project. And so began the rewilding of 3,500 acres in Sussex. Natural processes have been restored with large herbivores moving more freely in the landscape, (Longhorn cattle, Tamworth pigs, Exmoor ponies, Fallow, Roe and Red Deer) as proxies for animals that would have been present thousands of years ago. Each species forages in different ways, and the naturalistic way they move around the landscape affects the vegetation structure and creates a mosaic of habitats from open grassland to woodland, water meadows through to regenerating scrub and groves of trees. The project aims to monitor the changes in vegetation structure and communities, habitat patterns and distribution, and distribution of flora and fauna.

In January 2015 I started my role as ecologist at Knepp. I spent a lot of happy hours trudging around sallow thickets and emerging scrub, copses and water meadows, old woods and grazing lawns, as I learnt my way around the estate. Often my wellies, clipboards and pencils were lost forever as they were sucked down in to the claggy gloop. I can see now why this land was never going to be good for intensive modern farming with heavy machines and tight profit margins.

But what makes it bad for farming makes it excellent for aquatic invertebrates. The clay loves to hold water and we are blessed with several historic water bodies, such as a freshwater pond (which holds a colony of the beautiful water-violet), a hammer pond and a mill pond from the 16th century iron industry. More recently new seasonal and permanent water bodies (scrapes and ponds) have been created with the help of the Environment Agency and the Freshwater Habitat Trust, Sussex Wetland Officer, Fran Southgate and teams of volunteers.

The restoration of the River Adur is at the core the Knepp Wildland Project. It is not simply re-meandering a canalised river. It is restoring all the processes that affect how water runs through a landscape, from the moment the rain hits vegetation, trees and hedgerows, to when it sinks into the soil and filters through to the ditches, ponds, brooks and streams, then into the river itself.

Continued ...

The restoration of a thriving landscape often begins with water. It also begins with the restoration of more natural vegetation and soil structures in the whole river catchment area – 1,000 hectares are reverting from ploughed land to pasture, scrub and woodland. Trees and regenerating scrub help to naturally slow the flow of flood water across slopes, whilst also helping to absorb more water through the soil. We are encouraging the soil slowly back to health, so that it can be more of an absorbent sponge, and so that water runs off the land surface less quickly.

The tributaries of the river have been encouraged once again to seasonally use their floodplains — using natural woody material to slow down and store the flow, and by creating scrapes and other seasonal water holding features on the floodplain. Weirs and ditches have been removed and blocked, and old land drains smashed to prevent them from draining all the water from the land. Historic research showed us that the river was canalised for drainage in the early nineteenth century. The old meanders were clearly visible in the floodplain. Modern flash flooding was exacerbated by a Victorian drainpipe and ditch system throughout the estate, designed at getting water off the land as quickly as possible.

Image top left — Natural wood helps to diversify river flows, providing shelter and enabling natural river processes to create new habitat niches for dragonflies and a range of other species.

The overall objective for Knepp was to restore the stretch of the River Adur on the estate to its natural meanders, reconnecting it with the surrounding floodplain water meadows. Early indications are promising and it is hoped that in the coming years improved natural diversity in the river habitat niches will see increases in populations of key species including wading and nesting birds, insects, amphibians, aquatic and semi-aquatic vegetation.

The restoration of the channel and floodplain has had to incorporate wider catchment objectives for the Adur catchment and Knepp re-wilding programme, and has resulted in the re-naturalisation of just over 8km of the river, streams and brooks across the Estate; including the removal of weirs that were barriers to migratory fish; the restoration of 70 acres of floodplain; and the conversion of a linear pond into a proper functioning river. We hope that the river restoration project will help reduce downstream flooding and set an example for similar projects in the future. Knepp hopes to demonstrate that by storing floodwater higher upstream, there is less flood pressure on infrastructure, farmland, roads, bridges and conurbations downstream.

The wider benefits to the Knepp Estate and others though, are in biodiversity improvements. As part of my survey program I was keen to start looking at the different dragonfly and damselfly species that are using the water bodies here. Not surprisingly the weather wasn't optimum dragonfly spotting weather on many of the dates in 2015, but there was one good day – the 11th June. The temperature was 22°c at the beginning of the day and it just got hotter and more humid. No cloud and a very gentle wind. Perfect. I set out into the Wildland with Julie and Malcolm Redford, my dragonfly compadres for the day.

Continued …

Our first stop was the pond at the Knepp Safari Campsite in the area known as the Southern Block. Standing on the bridge we spotted the usual species: Common Blue Damselfly, Broad-bodied Chaser, Large Red Damselflies…and hang on…three male Scarce Chasers! This set the bar for the rest of the day. We saw 18 Scarce Chasers in total – 14 male, two female and two immature – on ponds, laggs and streams across the estate. That day we recorded 11 other species, including White-legged and Red-eyed Damselflies, Hairy Dragonfly and Black-tailed Skimmer. Scarce Chasers are present on the River Adur, and have been recorded at Knepp previously but not in these numbers.

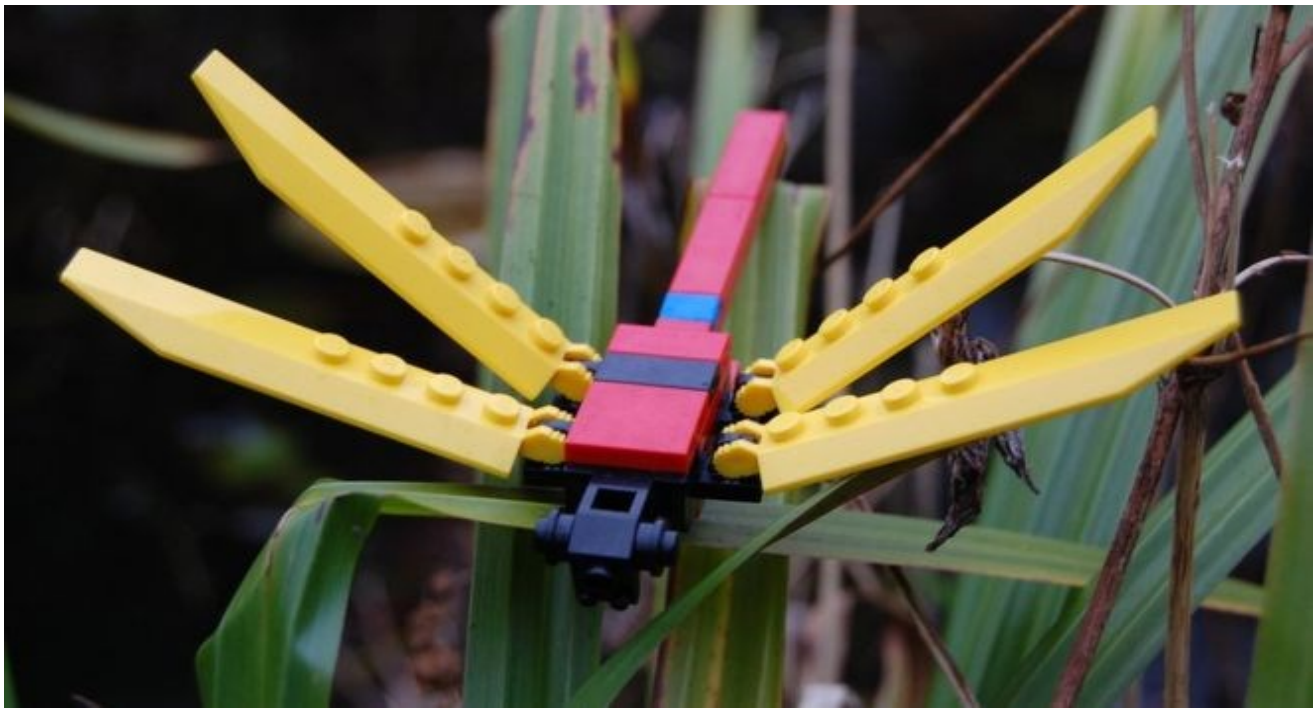
In 2016 I repeated the baseline dragonfly surveys that were conducted prior to the river restoration work in 2005. Dragonfly surveys on both the restored stretch of the river Adur and the previously canalised part of the river have shown an increase in activity and species. 18 species were found over two survey days in 2016 compared with 14 in 2005. Of note was the Scarce Chaser with four recorded along the river where none was recorded in 2005 (although they had been recorded there historically). After counting just ones and twos, we were pleased to discover a thriving colony of White-legged Damselflies on the grassland alongside the river. Hairy Dragonfly was recorded in the baseline survey and again in similar numbers in this survey.

No doubt improvements in water quality from the withdrawal of pesticides and chemical fertilisers has contributed to the increase in abundance of this species group, which includes a number of Banded Demoiselles and Beautiful Demoiselles – both particularly sensitive to pollution. In the 2005 June survey 40 Banded Demoiselles were recorded and in 2016 there were 138.

More scrapes have been created since then, using a rotary ditcher and we've been out doing some drain-bashing in the hope that new shallow water bodies will provide some more dragonfly habitat in due course. If you would like to come and see Knepp Wildland we have a beautiful campsite situated in a wildflower meadow, with luxury shepherd's huts and yurts, as well as pitch-your-own camping. Safaris exploring the Wildland and its wildlife run several times a week.

Penny Green, Ecologist, Knepp Rewilding Project

Lego fans build giant Cambridgeshire Great Fen wetland model



A Lego-mad couple are using their love of the plastic bricks to raise funds for a wildlife project. Mike Addis and Catherine Weightman are using 500,000 lego bricks to create a 10m (32ft) 3D "map" of Cambridgeshire wetland the Great Fen, complete with "native species". The lego fen is part of a long-term Wildlife Trust conservation project. More than 100 people have paid to help build Lego creatures to go on the map.

The Great Fen is a 50-year project to create a huge wetland between Peterborough and Huntingdon. Managed by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, it is one of the largest restoration projects of its type in Europe. Working with organisations including Natural England and the Environment Agency, they aim to transform the land and conserve its wildlife to eventually cover 3,700 hectares (9,140 acres). The idea for a fundraising and awareness-raising giant Lego model came about as Ms Weightman works for Natural England and colleagues were aware of her love of Lego creations.

Ms Weightman and Mr Addis have already made a few creatures such as dragonflies and spiders to populate the map, as well as buildings including a proposed visitor centre for Great Fen, complete with Lego public toilets. Jo Dixon, from the Wildlife Trust, said: "We aren't too particular, and if the odd dinosaur or alien turns up, we'll add it to the map anyway."

12 February 2017 www.bbc.co.uk/news/uk-england-cambridgeshire-38917415

The Last Newsletter?
No way - e-mail way!

Another great newsletter from the local dragonfly team, with a big thanks to Fran for putting it all together. I have to say, as the Sussex Group's treasurer, I do have mixed feelings though. A short and sweet two-sided black and white version would suit me fine as the keeper of the accounts and book-balancer, but how dull that would be and not half such a good read.

My mixed emotions? Well, fortunately, most of you receive the newsletter digitally, via the wonderful airwaves of the internet. However, some of you still receive it in the post, as a full-colour printed version. These days, this can cost up to a spectacular **£4.50** to print and **£0.65** to send each one on our local photocopier. We still sent out nearly 20 printed copies, which when you do the maths, starts to add up when you print two newsletters a year.

As you know, the Sussex Group of the BDS charges no fee and everything we do is voluntary; all the BDS membership fees go straight to BDS national and they rely on local groups to do whatever they can in their area, gratis. The SDS ask for donations, but truth be told we rarely receive any, and our main source of income is from selling our wonderful Dragonflies of Sussex books (again, a wonderful read!). You can see my dilemma, as I watch the printing and postage costs escalating with little income to offset it, I start to become a little nervous that we won't be able to support as much real conservation work to protect and restore our dragonfly populations to good health.

For those of you who have received this newsletter in the post, ***please*** would you reply with your e-mail address so that in future we can send the newsletter to you digitally, to save costs (just e-mail: fransouthgate@sussexwt.org.uk). We want to ensure everyone gets the newsletter, I certainly do because it's that good, we don't want to stop people receiving. It was cited as an example of best practice by the BDS themselves, so it really is worth a read.

If there is anyone out there who does not have a computer, then please let us know and I am sure we can come to some arrangement. For example, it could be downloaded and read at your local library, or you could refund the costs of production so I can balance the books each half year when we polish this fine machine.

Yours, the prudent treasurer, Phil Belden.

EYE — D Corner No 18

Hairy dragonflies (*Brachytron pratense*)

Flight times

The Hairy dragonfly is one of our earliest dragonflies, emerging before other hawkers from early May. Depending on the weather you might occasionally see them in flight as early as March or April, and sometimes they linger until late July.

Where to find them

They are mainly found near unpolluted, well-vegetated still waterbodies such as ponds, lakes, old gravel pits and slower moving stream.

Sussex and UK status

In the UK they are an uncommon species, although they are increasingly common and widespread everywhere but Scotland.

In Sussex they are localised along our river systems and coastal wetlands.

Factors affecting them

Hairy dragonflies have been badly affected by poor water quality and intensive farming since World War II . Many open water fen habitats have also been destroyed in the last 100 years, and so there are limited locations where they have ideal habitat to thrive. They also appear to benefit in areas which are sensitively cattle grazed.

Similar species

Could potentially be confused with other Hawker dragonflies such as Migrant and Southern hawkers, but its early flight season and relatively small size are good clues to its identity.

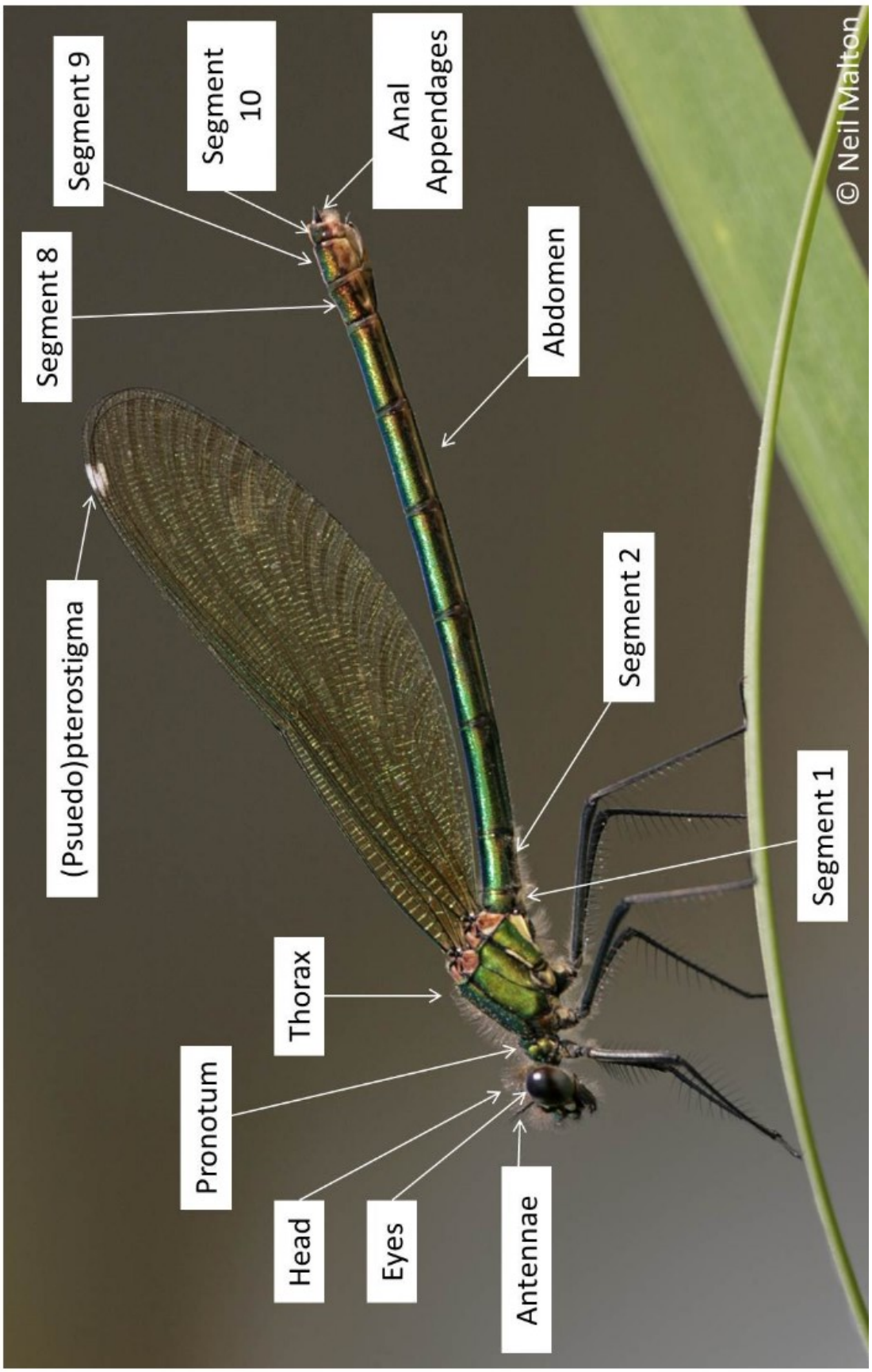
Continued...

This is the UK's smallest Hawker. It has a distinctly hairy thorax, oval spots on each abdominal segment and a long, thin pterostigma. The males are dark in appearance and the spots on the abdomen are blue, with green ante-humeral stripes. The females have yellow markings and much shorter ante-humeral stripes.

Hairy Dragonfly male © D Sadler

Hairy dragonfly female © J Luck

Confused by dragonfly and damselfly terminology? These handy diagrams from the British Dragonfly Society web pages should help you learn your pterostigma's from your pronotums!



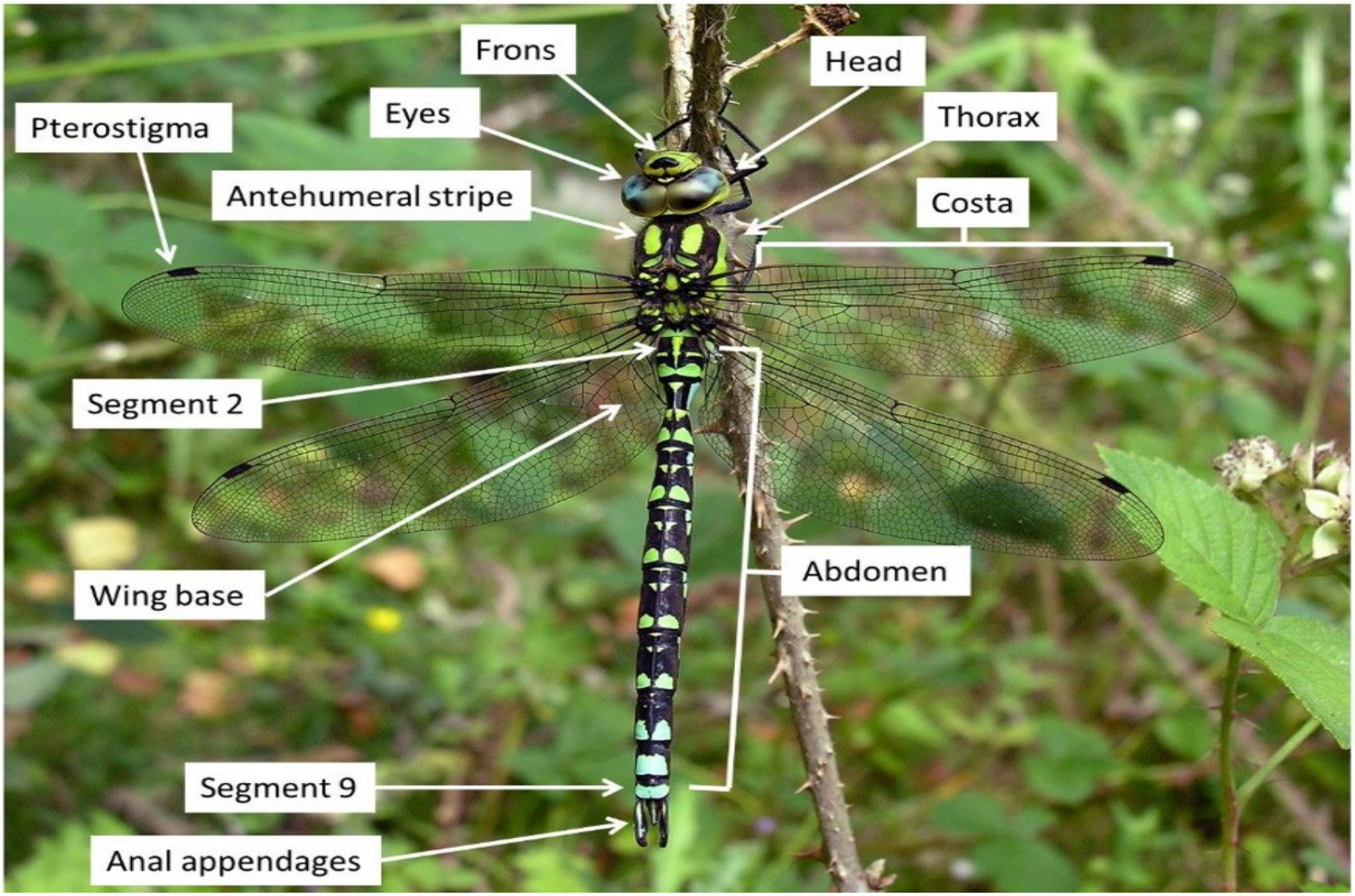
Damselflies are insects in the sub-order Zygoptera (meaning "paired-wings"). All four wings are near enough equal in size and shape. They are usually small, weakly flying insects that stay close to the water margins or water surface. When at rest, most species hold their wings along the length of their abdomen. The Emerald Damselflies are an exception and usually hold their wings partly open when at rest. They are therefore known as Spreadwings in North America. The eyes are always separated, never touching. The larvae have external plates (lamellae) at the end of the abdomen, which act as accessory gills.

The labelled diagram below may help to define the various anatomical terms used in the descriptions in the species pages.

Dragonflies

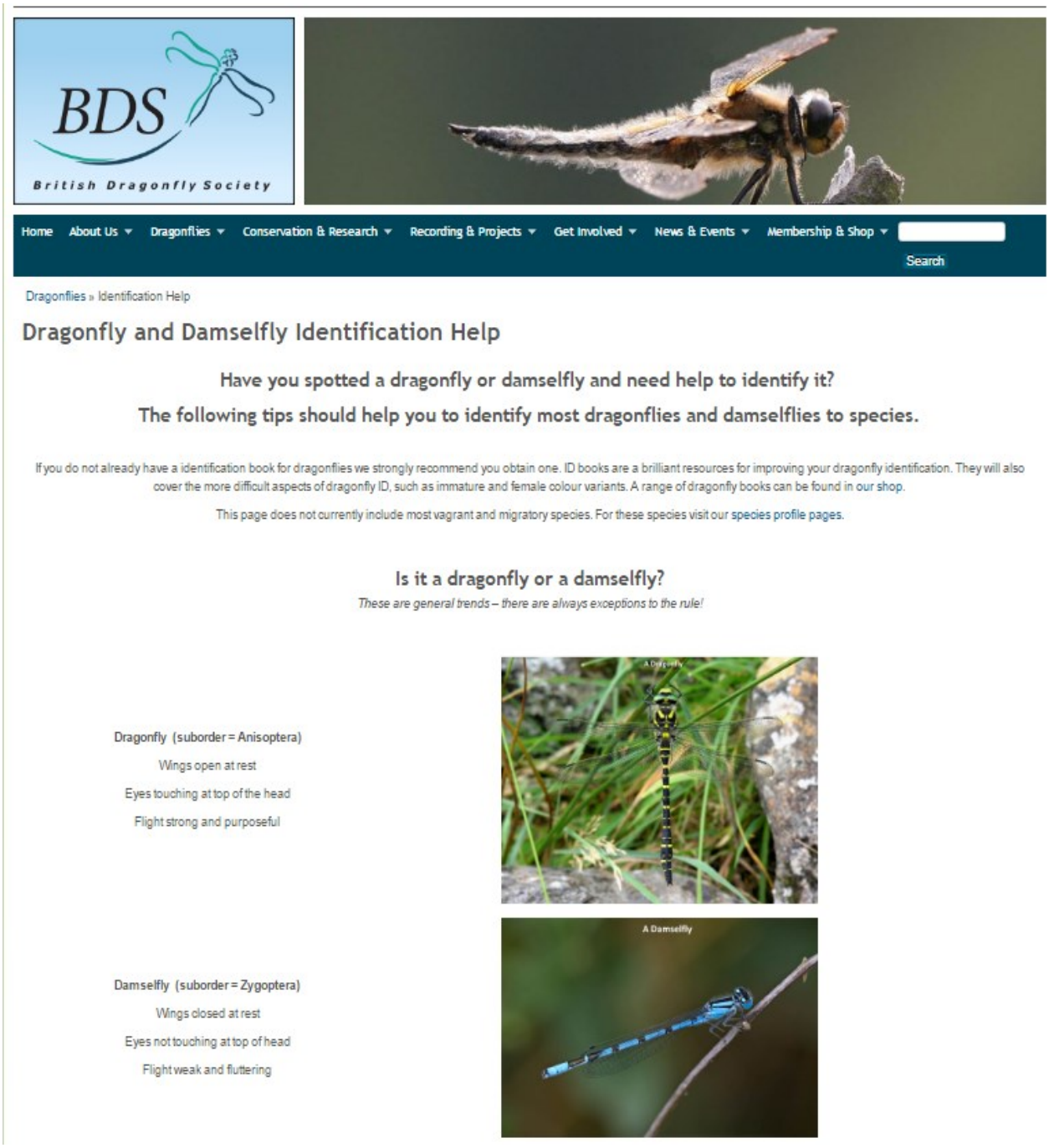
Dragonflies are insects in the sub-order Anisoptera (meaning "unequal-winged"). Hind wings are usually shorter and broader than forewings. They are usually large, strongly flying insects that can often be found flying well away from water. When at rest, they hold their wings out from the body, often at right angles to it. The eyes are very large and usually touch, at least at a point. The larvae have no external lamellae (gill plates).

The labelled diagram below may help to define the various anatomical terms used in the descriptions in the species pages.



National News

BDS launches a new dragonfly identification help page



www.british-dragonflies.org.uk/content/dragonfly-and-damselfly-identification-help

BDS Spring Meeting 2017
Report on a successful day

The BDS Spring Meeting at Green Hammerton Village Hall on Saturday 11 March 2017 was a great success. BDS welcomed around 75 attendees, as well as Pemberley Books, who ran a stand with some brilliant volumes on dragonflies and related subjects, new and old. The BDS would like to thank all speakers for coming along and taking part in what was a brilliant day.

After a welcome from Gen Dalley, BDS Conservation Officer, Pam Taylor, DCG Chairman, highlighted plans to produce a State of Dragonflies Report in 2020 to map the changes that have occurred since the publication of the original British Dragonfly Atlas. It will need continuing dragonfly recording effort and relies on recorders submitting their records and County Recorders validating them promptly so that they are available to be analysed and the results published in 2020.

We look forward to another event next spring.

'The Why? Group' launched

The BDS has a new Dragonfly Discussion Group - a forum for dragonfly enthusiasts to present and talk about interesting observations and personal study projects with a view to receiving feedback and stimulating further discussion. Also known as **The Why? Group**, it is aimed at UK species, though observations need not neoessarily have been made in Britain.

Anyone can visit the site, hosted by Google Groups, and anyone can apply to join. To avoid spamming, applications have to be approved.

Join the discussion at https://groups.google.com/forum/#!forum/dragonfly-discussion-group

?!

National Events

The International Congress of Odonatology 2017 (ICO2017)

Sunday 16th to Thursday 20th July 2017

For the first time, the World Dragonfly Association meeting will be held in the UK, providing a once-in-a-lifetime opportunity to meet up with dragonfly enthusiasts from around the world. The congress will include three special sessions associated with it's location in Cambridge this year :-

- Dragonfly vision
- Dragonfly flight, celebrating the contributions of Charlie Ellington
- Ten years since Philip, looking at advances in fields Philip Corbet contributed to.

The event will be help at the Gillespie Centre, Clare College, Cambridge. Registration is essential. Ordinary registration will close 31 March 2017. For more information and to register, visit the website: www.ico2017.org

Sus-

Dragonfly Events

SDS Field Trips 2017

Sunday 11th June : Wetland Wander

Location : Waltham Brooks. Postcode — RH20 1LS. Meet at the brick bridge, Grid ref — TQ03081626. https://assets.sussexwildlifetrust.org.uk/walthammap.pdf.

Leader : Penny Green
Please call Penny to check if not sure about the weather on 07960 388096.

Meeting time: 10.30 a.m.

PLEASE NOTE: parking is limited and you may have to park in Coldwaltham village and walk down the road to the site.

What you might see : Hopefully a diverse range of dragonflies including Variable and Hairy.

13th Aug : Hunt for heathland dragonflies

Location : Graffham & Lavington Commons. **Postcode** : GU28 0PT **Grid ref** : SU932196. https://assets.sussexwildlifetrust.org.uk/graffham-common-map.pdf

Meeting time: 10.30 a.m.

What you might see : Some of our rarer heathland dragonflies including Black Darter

Leader : Ben Rainbow Tel 07771688832

PLEASE SEE OUR WEBSITE FOR FURTHER DETAILS

Local Dragonfly Events

Go Bug Hunting — Rye Harbour Family Event

(31/05/17) Wednesday, 31st May 2017 2:00 PM - 3:00 PM

Go a-hunting with the warden, Chris, as he takes a closer look at the fascinating and bizarre world of insects and spiders. Suitable for accompanied children of all ages.

Meet at Rye Harbour Village car park, Rye Harbour, Rye, TN31 7TX.

SORRY FULLY BOOKED. WAITING LIST AVAILABLE

An Introduction to Dragonflies and Damselflies

(24/06/17) Saturday, 24th June 2017 10:00 AM - 4:00 PM

An introduction to the adult stage of these wonderful insects. Learn about basic dragonfly biology, habitats and management, distribution in the UK and Sussex, identification techniques and using dragonfly field guides. Suitable for anyone interested in natural history, no previous experience necessary. Both indoor and field session

Meet in the Classroom, Woods Mill, Henfield, West Sussex, BN5 9SD

SORRY FULLY BOOKED. WAITING LIST AVAILABLE

Freshwater Habitats Trust Freshwater Invertebrate Training

Sunday 21st May — 10 a.m. until we finish (roughly 3 p.m.)

Meet in Chailey common, Romany Ridge car park. TQ377207.
Details tbc. See website for further details.
FREE course. **BOOKING ESSENTIAL**. Course leader, Graeme Lyons.
Contact Fransouthgate@sussexwt.org.uk to book a place and for more information.

Sus-

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 bobforeman@sussexwt.org.uk or enter them into i record on the web.

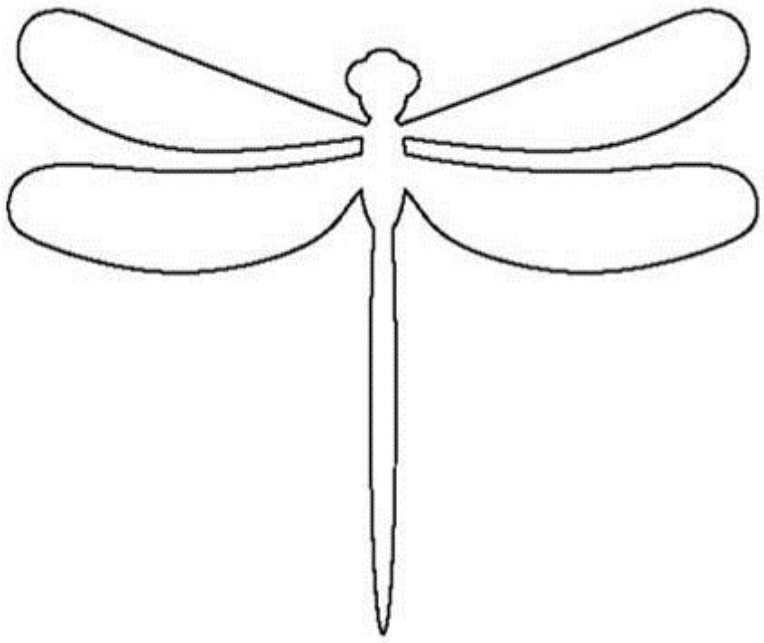
First and Last

The dragonfly season 2017 has begun, with a record of several newly emerged Large Red Damselflies at Duncan's Pond Bissoe Valley, Cornwall, on Saturday 25th March. There have also been several UK records of Vagrant Emperor during March. A Large Red Damselfly photographed by David Cooper was one of the first to be recorded in this year's UK dragonfly season. The Menz Lab Insect Migration and Ecology Research Group (@insectmigration, Twitter) have reported tens of thousands of Vagrant Emperors flying across the sea near the Sahara Desert. Azure's and Hairy's have been seen in Kent, and have started to peer their heads out in Sussex in early May. Let us know if you saw anything earlier than that!

Kids Corner

How about printing out these templates and using them to decorate your favourite things

You will need sturdy card, some scissors, and some imagination! and preferably a printer that you can print these images out onto! Cut the middles out of the templates below (with adult supervision if needs be), and then find something that your parents don't mind you printing them on to. You can dab over them with a sponge covered in paint to make a stencil, or you can use your template to draw round the outlines, and then colour in the dragonflies.



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. 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 Bob Foreman, 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

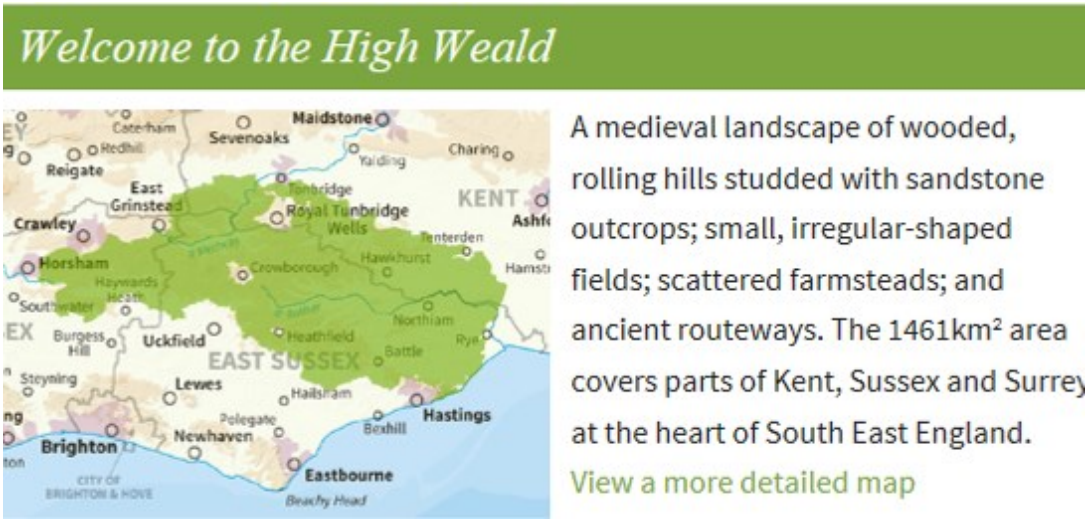
OS Grid reference (where possible)

Top Ten Things To Do To Keep Dragons Flying In Sussex

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

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.

High Weald AONB grant schemes



If you farm or manage land, or work with a community group in the High Weald Area of Outstanding Natural Beauty in Sussex, then you may be eligible for one of their local grant schemes to help enhance the local landscape for wildlife.

Recently a grants programme called the Lund fund has been established in collaboration with private donors and the Sussex Community Foundation. Sussex Lund will support small-scale, practical projects that improve the ecology and landscape of the High Weald. Grants of between £500 and £10,000 are available to charities, community groups, schools, churches, councils, farmers and landowners.

Another fund available is the National Grid fund. The overall objective of the scheme is to reduce the landscape and visual impact of National Grid's existing electricity infrastructure and enhance the quality of the affected protected landscapes. Where the visual impact of the electricity transmission line cannot be directly screened or otherwise mitigated the Initiative will consider funding projects that shift emphasis away from the transmission line by enhancing the landscape in other ways. This initiative is only relevant to an area within 3km of the National Grid's powerline at the eastern end of the AONB so consult them directly for more information.

Last but not least, the High Weald AONB have access to a range of professional advisors help to administer other grants based on restoring the local landscape character and land management traditions of the area. If you would like advice, or you think that you may have a project which needs funding then you can find further details on their website.

www.highweald.org

Contacts

Core Group

Chair:	Ben Rainbow — ben.rainbow@wealden.gov.uk
Editor & Wetland advisor:	Fran Southgate - fransouthgate@sussexwt.org.uk
Sussex BRC:	Bob Foreman - 01273 497521 - bobforeman@sussexwt.org.uk
Website: & Publicity	**Vacant position.** Please contact Fran Southgate
Secretary:	Bob Foreman / Penny Green
Pond Conservation Advisor:	Bev Wadge — ponds@sussexwt.org.uk
Technical specialists:	Phil Belden

Other Useful Contacts

Wildcall – Free advice on all wildlife issues. 01273 494777; WildCall@sussexwt.org.uk
British Dragonfly Society - bds@british-dragonflies.org.uk
Booth Museum - boothmuseum@brighton-hove.gov.uk. 01273 292777
Freshwater Habitats Trust (ex Ponds Conservation) — www.freshwaterhabitats.org.uk
Sussex Wildlife Trust — www.sussexwildlifetrust.org.uk/
National Insect Week — www.nationalinsectweek.co.uk

Donations

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

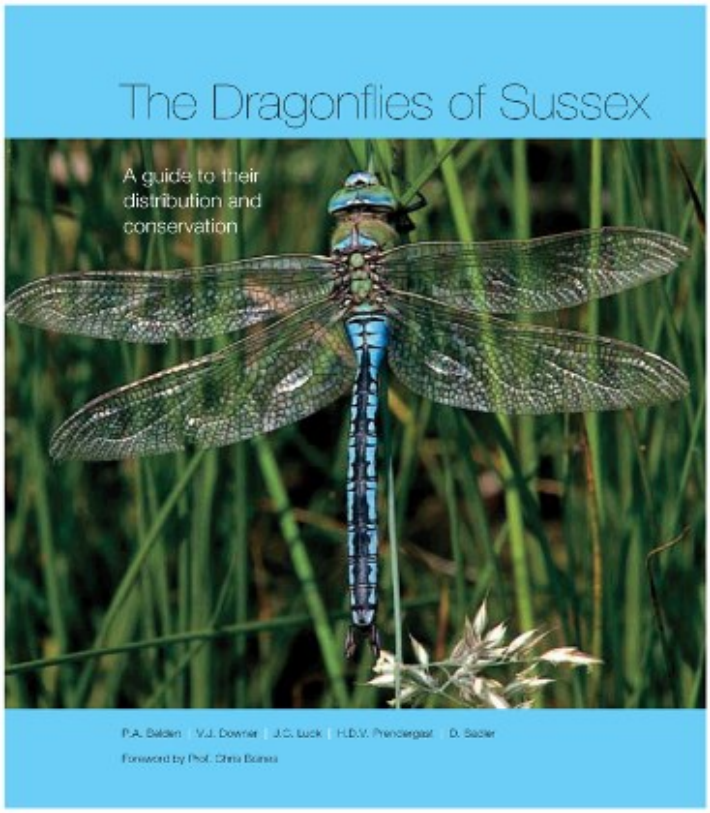
If you would like to make a donation towards dragonfly work and restoring wetlands for dragonflies then please write a cheque made out to British Dragonfly Society (Sussex Group), and send it FAO Fran Southgate, Dragonfly project, c/o Sussex Wildlife Trust, Woods Mill, Henfield, BN5 9SD. All donations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

Useful Publications

- The leaflet 'Dragonflies and Damselflies in your garden is available as a pdf file at :- www.british-dragonflies.org.uk/sites/british-dragonflies.org.uk/files/images/GardenDragonflies_0.pdf
- 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

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.