British Dragonfly Society Sussex Group Newsletter Spring 2013

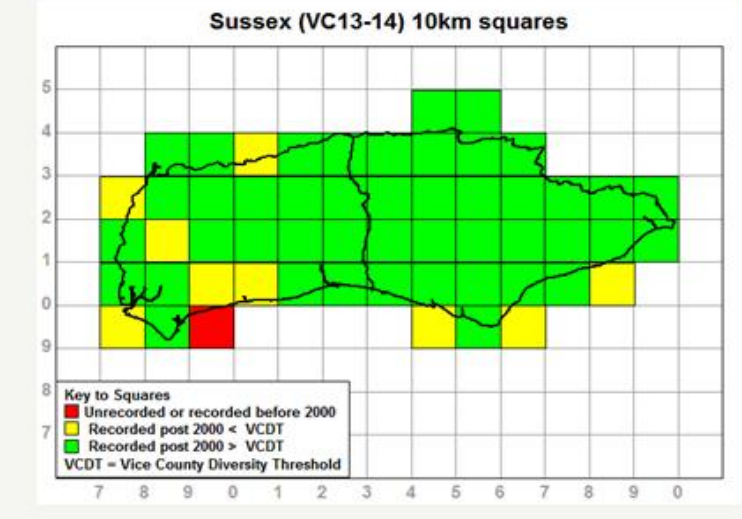
No 30

Sussex Dragonfly Records Top 70,000!

… So the Sussex Dragonfly Group would like to say a huge thank you and congratulations to you all for sending in so many fantastic sightings. As we speak, this mass of wildlife records is winging its way (pardon the pun!) to the British Dragonfly Society so that they can be included in the soon to be published National Atlas of Dragonflies.

The National Dragonfly Atlas was launched by Chris Packham in 2008. The aim of the atlas is to update the known distribution of British dragonflies and damselflies over a five year period. Publication of the atlas is scheduled to coincide with the 30th anniversary of the BDS in 2013.

The new atlas is urgently required to record the dynamic changes occurring with our Dragonfly fauna. Climate change is contributing to earlier spring emergences, along with changes in the range of a number of UK species. In addition, new species are becoming established in Britain, as demonstrated by the recent rapid spread of the Small Red-eyed Damselfly. It is hoped that the new atlas will provide evidence for the future assessment of the impact that climate change and other environmental changes are having on our dragonfly fauna. For more information see :- http://www.british-dragonflies.org.uk/index.php?q=content/national-dragonfly-atlas



Rare Club Tail Dragonfly seen in Arundel

A photo snapped during a boat trip at Arundel Wetland Centre in 2010 had dragonfly experts excited that the wetland reserve at the Arundel Wildfowl and Wetland Trust (AWWT) may be a breeding ground for the rare Club-tailed dragonfly.

Wildlife guide and boat driver Clive Griffin took the photo while taking visitors through the Wetlands Discovery area of the reserve. "It's not a great photograph, just a dragonfly sitting on the edge of my boat" said Clive, but he suspected, and Paul Stevens grounds manager of the Wildfowl & Wetlands Trust reserve confirmed, this was a Club-tailed dragonfly - which had not been seen at the wetlands centre before.

Dragonfly expert David Chelmick of the British Dragonfly Society said "Clive showed me a photo of a fully adult male taken in late June 2010. This insect must have been on 'territory' and may well indicate that the species is breeding in the wetlands created by WWT, some of which look perfect for the beast". As a result, in 2013, the Arun and Rother Connections (ARC) project will be doing a full survey of the river to further understand what features of the river suit this dragonfly, and whether its range may have expanded or contracted in recent years.

The boat drivers at the AWWT are assisting with the survey by keeping an eye out for the Club-tailed dragonfly during breeding season this June. They are scouring the reedbed by eye during their regular trips, looking for dragonfly exuviae – the dry, brown exoskeleton left after the dragonfly moults from its nymph stage. Only 1.5 inches long, this husk can identify a species of the dragonfly and even its sex.

The Club-tailed dragonfly (*Gomphus vulgatissimus*) is known to breed on the Arun river north of Pulborough and on the Rother around Fittleworth. This dragonfly is only found at 10 sites in the UK, It is confined to Midland and Southern counties with the River Dee supporting the most northerly population. It is found on the mature stages of seven river systems and their tributaries; five of these rise in the Welsh Uplands (the Dee, Severn, Wye, Tywi and Teifi) and two in Southern England (Thames and Arun). The dragonfly likes large, fast flowing tidal rivers and it breeds in the quieter, stiller parts of these rivers in the silty bottom. In June & July breeding male club tailed dragonflies hold 'territory' by driving other males from the area and mating with any nearby females.

Published June 2012 on www.visitsussex.org

Keep your Peepers out for Club-tails this year!

This year, the Arun and Rother Connections project is teaming up with the Sussex Dragonfly Group to give the Arun and Western Rother rivers a good all over survey for the Club-tailed dragonfly. We want to find out just how far and wide this rare dragonfly might be spread, following new sightings at the Arundel Wildfowl and Wetlands centre and further afield.

If you live anywhere between Arundel and Horsham, or Pulborough and Petersfield, and you take regular walks along public footpaths near the river then we'd love it if you could keep your eyes and your cameras out for this distinctive looking dragon. We are happy to screen any photos taken if you want to send them to us or to post them on our website. For the more experienced surveyors, we may also be able to arrange access to some private areas of land for the surveys, so if you are interested, get in touch.

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

The larvae of the Common Club-tail live within silt and mud on the riverbed for 3 to 5 years, and research shows that they prefer the inside bends of meanders, with clumps of emergent vegetation.

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

Gomphus vulgatissimus / Club-tailed dragonfly © G Gowlett

They are an early species and are most likely to be seen from May to the end of June/early July. They have a tightly synchronised emergence triggered by increasing day length and rising water temperature in May and June. The larvae wait for the sun to come up before leaving the water and travel up to 20m or more to find a suitable emergence site. Its nearly time for them to be emerging so we are poised with bated breath to see if we can expand their known Sussex range.

For more information on the Arun and Rother Connections project see — www.sussexwildlifetrust.org.uk/arc_project/index.htm

What do sky scrapers have in common with ponds?

….The way they polarise light acts as a magnet to some animals, say researchers. This unwanted side effect from some industrial materials – including road surfaces and automobiles – is called polarised light pollution, and Michigan State University says the phenomenon is widespread enough that it is disrupting ecosystems.

When light bounces off smooth, dark surfaces it becomes polarised – meaning the light wave is aligned in one plane. In natural environments, this most commonly happens around water, but humans excel at making smooth surfaces. "Cars, asphalt, oil pools, and windows polarise light more strongly than water," To animals tuned to distinguish polarised light and use it as an environmental cue, these objects look more like water than water.

"Even when given the choice between water and human-made surfaces, some insects prefer to lay their eggs on – and settle near – the latter."

To begin to assess the effect of this newly identified form of pollution, Robertson gathered examples of how human-made surfaces are, or could be, disrupting the life cycles of some species. The team say at least 300 aquatic insects are likely to be affected by polarised light. Male dragonflies, for example, often perch on car antennas, attracted to the reflective car paint. Female aquatic insects have been found to lay their eggs on car bonnets, cement floors, and even roads.

The effects are likely to cascade up the food chain, says Robertson. According to the researchers, the attraction of roads and black plastic sheets to insects causes these objects to function as bird feeders. Previous work has shown that some bird species hunt insects around such surfaces.
"We can speculate on the more indirect effects of polarised light pollution - like reducing food availability for fish and amphibians that prey on aquatic insects – but the evidence is still lacking on community level effects," says Robertson.

He and his colleagues say that although the problem has been largely ignored so far, it is a relatively easy one to fix. Roads would polarise light less if the asphalt had more gravel, making them rougher, and buildings can be built of less reflective materials. If the ecologists have their way, dark glass-covered sky-scrapers could soon go out of fashion.
Journal reference: *Frontiers in Ecology and the Environment* (DOI: 10.1890/080129)

Dragonflies and Damsels disperse in the heat

By *Dave Armstrong* 29 Feb 2012

Christian Hof and his co-authors have looked in depth at how water habitats affect the dispersal ability of animals in the landscape, including under climate change scenarios. In the Royal Society Journal, *Biology Letters*, the article on "How habitat stability affects dispersal and the ability to track climate change," he and his international group of researchers studied every European member of the ancient Odonata order of insects (dragonflies and damselflies) and their ability to respond to changes in wetland habitats.

A stream or flowing water habitat tends to last longer in the landscape than a lake or still water habitat, which fills in over time, or which can be seasonal or temporary. The test here is whether dragonflies and damselflies have been able to adapt more quickly to recent climate change where water is still or where it is flowing.

Lotic species (in running water) it appears, would be less able to disperse to new habitats because they need (or have had) more time to equilibrate with their longer-term home ground. Still water species have a larger range than the lotic species and a lower genetic diversity because they have always had to be more adaptable to the changes in still water wetlands like ponds and lakes. The recolonisation of Europe by still water species after the last glaciation for example was faster for still water species than for running water spp.

Research into the lentic water associated dragonflies indicated that they are closer to equilibrium with their climates in most of the results. Low stability of habitats selects animals with the ability to adapt and to disperse, the more generalist species if you will. But the availability or non-availability of a habitat obviously affects whether a species can spread, such as when no freshwater is available.

Pollution, land-cover change, weather and predators could equally affect the dispersal of dragonflies and damsels. The authors in this study assume that both lotic and lentic habitats would be equally affected. What the multifarious dragonflies do show however, is that within their Odonata group, different dispersal abilities occurred within different habitat types. This means that all animal and plant groups might have varying abilities to survive global warming, Most of this is common sense and can be learned by observation, but its good to have common sense backed up by science. What it does mean however is that dragonflies, yet again come tops in the environmental indicator species stakes.

http://www.earthtimes.org/climate/dragonflies-damselflies-disperse-heat/1847/

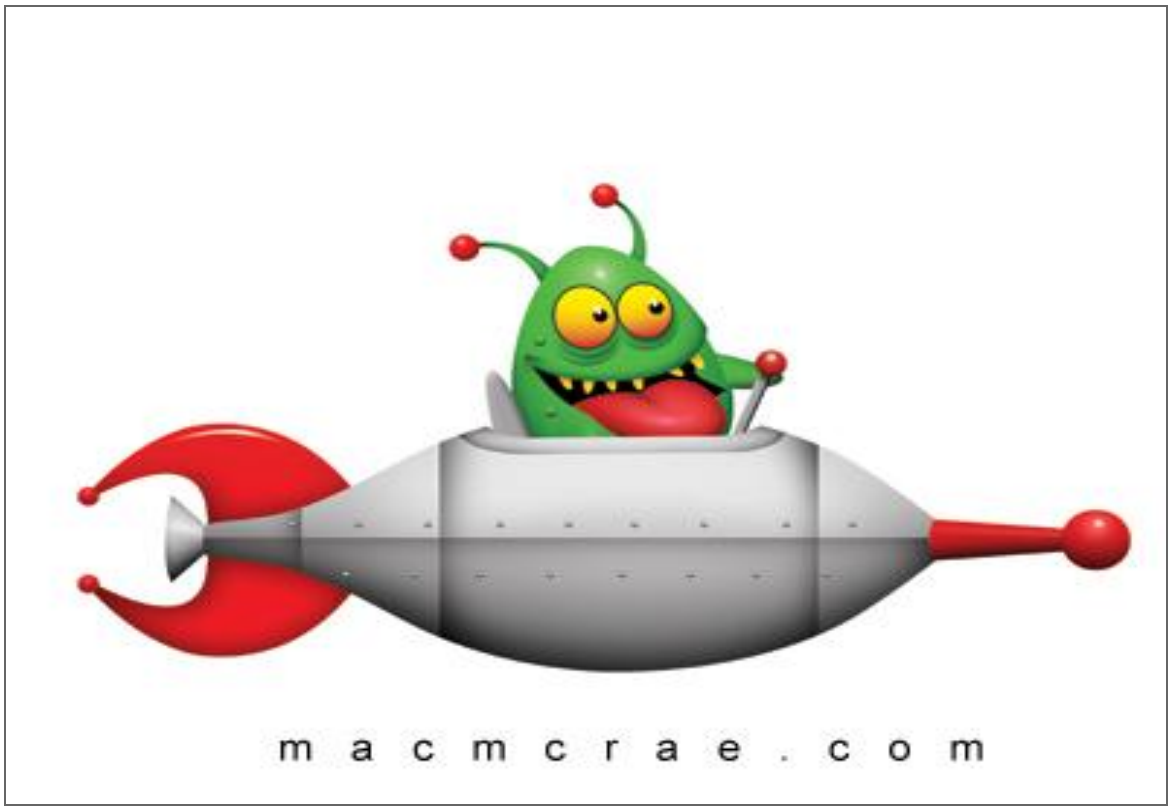
Aliens are banned from the UK!

In April 2014 five species of aquatic invasive plant species are to be banned from sale under section 14Z(a) of the Wildlife and Countryside Act. The species have been chosen because of their negative effects on both the environment and economy. The species are:

- Floating water primrose (*Ludwigia grandiflora, Ludwigia uruguayensis and Ludwigia peploides)*
- Floating pennywort (*Hydrocotyle ranunculoides*
- Parrots feather (*Myriophyllum aquaticum)*
- Australian swamp stone-crop *(Crassula helmsii)*
- Water fern *(Azolla filiculoides)*

This ban is following a consultation in 2007 of proposals to ban the sale of 28 invasive non-native species (13 animals and 15 plants) to prevent their establishment in the wild. It is to be implemented in a year to allow retailers to conform to the new measures and to stock alternative plants.

This is really good news for our wetlands, although some might say shutting the stable door after the horse has bolted!



Dragonflies Show Human-Like Powers of Concentration

By Stephanie Pappas, LiveScience Senior Writer | LiveScience.com – Thu, Dec 27, 2012

Dragonflies lack the large brains of humans, but their brains still get the job done. According to new research these insects have brain cells capable of feats previously seen only in primates. Specifically, dragonflies can screen out useless visual information to focus on a target, a process called selective attention. The new study, published Dec. 20 in the journal Current Biology, is the first to find brain cells devoted to selective attention in an invertebrate animal.

Selective attention is crucial for responding to one stimulus among the dozens of distractions that clamour for notice at any given time. "Imagine a tennis player having to pick out a small ball from the crowd when it's travelling at almost 200 kilometres an hour. You need selective attention in order to hit that ball back into play." But little is known about how the brain locks onto its targets and ignores all else.

The researchers have long studied insect vision, and the dragonfly turns out to be quite adept in that arena. "The dragonfly hunts for other insects, and these might be part of a swarm — they're all tiny moving objects," Wiederman says. "Once the dragonfly has selected a target, its neuron activity filters out all other potential prey. The dragonfly then swoops in, and they tend to get it right 97 percent of the time."

Using a glass probe with a tip 1,500 times smaller than a human hair, the researchers measured the neuronal activity that enables such amazing aerial hunting skills. A similar process is at work in the primate brain. "We believe our work will appeal to neuroscientists and engineers alike," O'Carroll said. Because the insect brain is simple and accessible, future work may allow us to fully understand the underlying network of neurons and copy it into intelligent robots."

Space Dragonflies !!

Might dragonflies be more useful than people in space?

Life on planet Earth is very diverse and one thing which is particularly fascinating is the extraordinary capability of insects. It is intriguing to imagine the strength and agility of creatures like ants and cockroaches whose abilities could be transposed from micro to macro — something of the sci-fi dream (or nightmare!), and with our modern technological capabilities, easily developed.

News channels tell us that our current 'space mobiles' or probes may not always be adaptable enough to the conditions and situations in which they find themselves on a new planet. However, our increasing ability to use nano technology means that we now have the technical capabilities to engineer small but very sophisticated machines based on the natural characteristics of insects such as cockroaches, spiders or even dragonflies.

Cameras and other equipment can be put inside the exoskeletons of these robotic insects, and could even be placed where their eyes would normally be — in the case of the dragonfly enabling the micro-machine to have almost 360° vision. Combining the robustness of a cockroach with the flying agility of a dragonfly could prove quite dramatic results. It solves problems of walking on the rough surface of such planets and adds great mileage to existing research capabilities. I'm sure it will come soon, but we are waiting with bated breath to see if dragonflies will end up in space!

Dragonflies, as climate change indicators

Monitoring communities of climate sensitive species, such as insects, could enable scientists to develop indicators for climate change effects on biodiversity and this could help devise better policies to protect wildlife.

With climate change flora and fauna shift their seasonal inner clock. For example, fruit trees blossom earlier than usual.
However, many species may not be able to adapt as quickly as the climate is expected to change, according to a recent report by the European Environmental Agency. As a result, there is currently a need to develop simple measures of climate impacts on biodiversity which could help policy makers to develop biodiversity protection measures to mitigate and adapt to the effect of climate change.

Insects, for example, are good climate indicators as their development depends on temperature. German scientists have now found that the regional composition of butterfly and dragonfly communities has already changed in the last decades. This is according to a study called "Climate Change and Biodiversity". "We know a great deal from modelling studies [about climate impact on biodiversity], but we know to a lesser extent what really happens," Says Maik Denner.

The study is based on using biodiversity monitoring to assess the effect of climate change, using established biodiversity monitoring programmes such as existing ones in Switzerland, the UK and Germany's North Rhine-Westphalia. In their study, the scientists used species distribution and monitoring data to calculate the so-called community temperature index (CTI) of butterflies and, for the first time, dragonflies.

Changes in the CTI over time, correlated with changing temperature, indicate shifts in the species composition of a particular community. If it increases, as in the present study, "the proportion of warm-temperature dwellers increases while the proportion of cold-temperature dwellers decreases," Denner explains. However, the CTI of both communities did not change to the same extent as the temperature did. This suggests that the observed shifts in range were not able to compensate for the observed rise in temperature. It remains to be seen therefore whether all our dragonflies will be able to adapt to climate change, and if they do, which ones we should watch to show the changes.

March 6, 2013 by Constanze Böttcher; Photo Credit: Heiner Blischke

EYE — D Corner No 12
Scarce Emerald Damsel
(*Lestes Dryas*)

www.british-dragonflies.org.uk/species/scarce-emerald-damselfly

The Scare Emerald Damselfly (*Lestes dryas*) is a medium sized metallic green insect that, unlike most other damselflies, usually rests with its wings half open at an angle of approximately 45degrees. Once mature the male and female develop different colouration with the males usually being more noticeable than the females. Adult males have bright blue eyes and develop a powder blue pruinescence on the thorax between the wings and on the segments at the top and bottom of the abdomen. In comparison, the females tend to be a much duller green and are therefore less easy to see.

Male Scarce emerald damsel © D Sadler

Female Scarce emerald damsel © D Sadler

The Scarce Emerald Damselfly can easily be confused with the more common Emerald Damselfly (*Lestes sponsa*) especially as they are often found in the same habitats. However, the Scarce Emerald is a more robust damselfly and has subtle differences such as brighter blue eyes, a less extensive pruinescence in the male, and different abdominal markings on segment two in the female.

The female Scarce Emerald Damselfly has rectangular paired spots as opposed to the rounded marks seen on the female Emerald Damselfly and the side of its body is also chocolate brown.

Close examination of the anal appendages or the ovipositor is required to confirm identification beyond doubt. *Lestes* larvae and exuviae can be separated from other damselfly species firstly by the shape of the labium and prementum and banding of the caudal lamellæ. However, separating the Scarce Emerald Damselfly and the Emerald Damselfly can only be achieved definitely by close examination of the mouthparts (i.e. labium and prementum).

Scarce emerald damsel Eye-D continued .....

Status

The Scarce Emerald Damselfly is a rare and local species, which has been recognised as vulnerable by the UK statutory conservation agencies. It is listed under category 2 (vulnerable) in the British Red Data Book on Insects. In 1980 it was declared as "probably extinct", but was rediscovered in Essex in1983. The decline was thought to be a result of habitat loss and pollution, although it is likely that the species was also under-recorded and overlooked. Consequently, the exact status of *L. dryas* is unclear. Recent records suggest that the species is out of immediate danger but the reasons for the recent decline still remain largely unexplained.

Distribution

L. Dryas is widespread in the Northern Hemisphere, where its range extends across North America and Eurasia. In Europe it is widespread and can be found from Portugal to Southern Finland. It is also present in the Near East and Japan.

In Britain they have never been common, although historically they were more widely distributed in Eastern England than they are today, ranging from East Sussex to South Yorkshire. Currently the species has strongholds on the coastal and estuarine marshes of Essex and North Kent and in the Norfolk Brecklands.

Ecology and Habitat Requirements

L. dryas can occur in two types of habitat in the UK:

- In the dense vegetation of shallow marsh pools and drainage channels such as ditches and lakes or ponds that are near the end of their natural cycle. Breeding sites always appear to be well vegetated with submerged and emergent vegetation.
- In seasonal and temporary water bodies, which may be subject to a drying out period.

The occasional drying out of both types of habitat stops the presence of fish, which are major predators of Lestes larvae. The larvae tend to float in mid-water and so are easy prey. Lestes over-winter as eggs in vegetation, however this presents an additional danger when vegetation containing the eggs is grazed or cut, resulting in the potential eradication of a population. *L. dryas* is nonetheless well adapted to cope with drying out and drought conditions and eggs that are laid in marginal plants which are not grazed or cut are free to hatch the following year after water levels have risen.

Unlike many Odonata species *L. dryas* also lives in brackish water although the degree of saline tolerance has not been established. It appears that populations are extremely localised at brackish sites. There are therefore subtle habitat preferences that have not yet been identified.

L. dryas lay their eggs in tandem, inserting them into the stems of marginal wetland plants, usually above the level of the water. Unlike most other species of damselfly the eggs overwinter, hatching in spring. The larvae develop rapidly and can mature within 8 weeks. Generally, they live among dense vegetation although it is thought that they can also survive in mud beneath matted vegetation. Adults begin to emerge towards the end of June and can be seen on the wing until the end of August, although they often stay within marginal vegetation. When disturbed, they often feign death, folding legs and wings and falling down into the dense vegetation base.

Local News

Welcome to WEDG!
The WEalden Dragonfly Group

The Weald contained as it is by dragonfly unfriendly chalk downland, is an obvious natural region that is rich in dragonflies and poorly studied. Back in the late 1940s Norman Moore discovered a number of colonies of Scarce Emerald damselfly (*Lestes dryas*) in the Rother and Brede valleys. Apart from a few isolated records, the species was thought to be extinct in this area, and no records have been received of its presence.

Last year at Sissinghurst Castle following some wetland habitat creation, a small colony of Scarce Emeralds was discovered. Was this a new colonisation or has the species been present, unobserved in the area for the whole time? We simply do not know and this led us to consider that better surveying of the region might help provide the answer. Thus WEDG was born.

The aim of WEDG is to:

- Inform landowners and people who manage our wetland habitats, of what diversity of dragonfly fauna exists on their property and
- Encourage field workers to carry out surveys of key areas in order to build up a detailed and comprehensive picture of the status, distribution, life histories and conservation requirements for the region's key species

WEDG is an informal inclusive group open to anyone interested in the dragonflies of the region. If you fall into this category you are cordially invited to join us. Please contact John Luck for more details. John Luck at wedgsvy@gmail.com or David Chelmick at macromiaman@gmail.com or visit the WEDG website: http://wealddragonflygroup.weebly.com

Welcomes, Thank You's & Goodbyes

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

If you would like to view your dragonfly records online, they are accessible via the National Biodiversity Network Gateway, which will be updated soon with the new 2012 records.

National News

Artistic accolade

It was extremely pleasing that the recent British Dragonfly Society's Recorders' Conference opened with a special award. A signed Ruddy Darter print by artist Richard Lewington was presented to Ingrid Twissell by BDS President Pam Taylor to mark the one millionth dragonfly record to be sent to the BDS.

This landmark achievement would not have been possible without the dedicated efforts of many hundreds of volunteer recorders throughout the UK. Back at the start of 2008 when the BDS launched recording for the new dragonfly atlas, the database held just over half a million dragonfly records. To double that total to a staggering one million records in just five years is a phenomenal achievement. Sincere thanks to all BDS and other contributors!

British Wildlife Photography Award Call for Entries

The British Wildlife Photography Awards were established to recognise the talents of photographers practising in Britain, whilst highlighting the great wealth and diversity of Britain's natural history. Now in its fifth year, this highly acclaimed and unique wildlife photography competition has captivated the nation with out-standing and beautiful imagery.

Emerald Damselflies by Les Gibbon

With twelve separate categories the subject matter covers everything from marine life and animal behaviour to creepy crawlies and urban wildlife. By popular demand a new category has been introduced which may be of interest to budding dragonfly photographers out there - Natural Details - the beauty of nature close up. Find out more about the categories and your chances of entering at www.bwpawards.org/categories

Dragonfly Events 2013

Local

An Introduction to Dragonflies and Damselflies

Date:	Thursday 27th June
Venue:	Linklater Pavilion, Railway Land Nature Reserve, Lewes, East Sussex, BN7 2FG
Time:	10:00 - 16:00
Tutor:	Mike Russell, Sussex Wildlife Trust
Content:	Suitable for beginners and people with a little knowledge, covering basic dragonfly biology, habitats, management and identification techniques.
Cost:	SWT Members £27.50, Non-members £38

To book please ring 01273 497561

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

Introduction to Adult Dragonflies and Damselflies

Venue:	Henfield. Please contact IEEM for further details (http://www.cieem.net/training-events)
Date:	Friday 5th July 2013
Time:	9.30 a.m. start
Tutor:	Mike Russell, Sussex Wildlife Trust
Content:	Suitable for beginners and people with a little knowledge, this course will focus on dragon and damselflies in their adult stage. It will cover: identification techniques and skills, the basic biology of these insects, their habitat preferences and the geographical distribution in Sussex and the UK.
Cost:	IEEM Members £80, Non members £160

To book please ring 01962 868626

BDS Sussex Group - Field Trips

Amberley to Pulborough Amble (7 km walk)

Date:	To be confirmed
Time:	10.20am until 3.50pm
Venue:	Middle Arun valley
Meeting Point:	Amberley Train Station TQ026118 (10:17 from south; 9:57 from north)
Finish Point:	Pulborough Train Station TQ042185 (15:51 southbound; 15:55 northbound)
Leader:	Phil Belden (07747 664093) will be coming in on the 10:17 train.
Possible Species:	Variable Damselfly, Beautiful and Banded Demoiselle, Emperor Dragonfly, Broad-bodied Chaser, Southern Hawker, Four-spotted Chaser.
Additional Info:	Please bring lunch and your own refreshments. Donations welcome. This is a linear walk (not a circular) where we will be walking from Amberley Station to Pulborough Station. We have coincided start & finish times with the train times. (see above).

BDS Sussex Group - Field Trips cont...

Dragons & Damsels at Combe Haven/Filsham Reedbed

Date:	Saturday 20th July
Time:	12.00pm until 2.00pm
Venue:	Combe Haven / Filsham Reedbed
Meeting Point:	Bulverhythe Recreation Ground car park, off A259 at TQ775087
Leaders:	Ben Rainbow and Jon Wood (07748 490110 or 07762 172600 on the day)
Possible Species:	Variable Damselfly, Brown Hawker, Southern Hawker, Emperor, Four-spotted Chaser.
Additional Info:	Please bring lunch and your own refreshments. Donations welcome. This is part of the Wild Hastings event programme' 'family fun day'. Car park and toilet facilities available. Children welcome if accompanied by an adult. No dogs please.

Quest for Emeralds at Buchan Country Park

Date:	Wednesday 24th July
Time:	10.00am until 3.00pm
Venue:	Buchan Country Park
Meeting Point:	Meet outside countryside centre, Buchan Country Park, Crawley, RH11 9HQ TQ245347.
Leaders:	Penny Green, Ben Rainbow & Tom Forward (07748 490110 or 07960 388096 on the day)
Possible Species:	Brilliant Emerald, Variable Damselfly, Red-eyed Damselfly, Brown Hawker, Southern Hawker, White-legged Damselfly.
Additional Info:	Join us for a field day identifying and recording dragonflies and damselflies in around Buchan Country Park. There will be opportunities to learn or brush up on your identification skills in the company of enthusiasts. We will be looking out for Emerald dragonflies in particular. This event is a joint event run by Sussex Dragonfly Group, Gatwick Greenspace Partnership & WSCC. Open to all, children under 16 should be accompanied by an adult. Limited disabled access. Free parking. Bring a packed lunch & water bottle and binoculars & guidebook if you have them. Donations welcome.

Ashdown Forest & Moorlands Adventure

Date:	Saturday 27th July 2013
Venue:	Old Lodge/ Moorlands
Time:	Meet at 10:30am
Meeting point:	In Old Lodge SWT Reserve Car Park (TQ469306)
Leader:	John Luck.
Content:	Looking for acid habitat specialists including Small Red Damselfly, Keeled Skimmer and possibly Black Darter. Then on to Moorlands for Brilliant Emeralds by kind permission of Mr and Mrs Love.

Dragonfly Events 2013

National

The British Dragonfly Society celebrates its 30th Anniversary this year, and is planning a whole year of celebrations.

In recognition of its achievements and to mark 30 years of dragonfly recording, the BDS joined forces with the Biological Records Centre for a joint annual event in March this year. All dragonfly recorders, national recording scheme representatives and interested individuals were welcomed. It was something of an international event, and there were talks and presentations from people as far afield as Belgium and from bird groups as well as dragonfly organisations.

To help celebrate its 30th year, the British Dragonfly Society is encouraging everyone to put on dragonfly walks or dragonfly themed events to celebrate. If you and your organisation are planning an event involving dragonflies, send them the details for their Events page so that they can advertise your event alongside their own walks and field meetings.

For their part, they will be running up to thirty 'Dragonfly Walks for Beginners' to introduce as many people as possible to the fascinating world of dragonflies. These walks will be in addition to their usual programme of field meetings.

The BDS will also be holding another Dragonfly Day at Wicken Fen in Cambridgeshire on Sunday 28 July to conclude National Dragonfly Week

New to Recording Dragonflies?

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

1. Your name and contact details
2. The date you made your sighting
3. The name of the site you were at
4. An OS Grid Reference for the site (Guide on how to do this to follow very shortly)
5. What you saw

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

Male Southern hawker © B Rainbow

First and Last

Our most esteemed committee member Jon Wood, spotted a male Common Darter on the seventh of November in Plumpton and five coupled pairs of Common Darters at Sheffield Park on the 11th of November. Unfortunately for him, these late sightings were pipped to the post by Adrian Thomas who saw a male Common Darter basking and flying at Pulborough Brooks on the 25th of November.

Kids Corner

Dragonfly Bingo

Would you rather avoid busting out the craft supplies? Well then, you may want to think about giving the kids an opportunity to play a few rounds of dragonfly bingo. There is a website called teach-nology that offers access to a free bingo card maker. You can use it to create customized bingo cards featuring names or photos of different dragonflies, although you'll also need to invest in some bingo daubers!

Pin the Wings on the Dragonfly

Some younger children enjoy playing a game of "pin the wings on the dragonfly." There are several websites that offer large pictures of dragonflies that can be printed out and used to make the game board picture, and then you just need to print out a few pairs of wings separately. As far as the blindfold goes, You could create it out of dragonfly clad fabric just for that extra touch.

Dragonfly, Dragonfly, Bird

The kids might also have fun playing "dragonfly, dragonfly, bird." It is played just like the classic children's game "duck, duck, goose." The only difference between the two games is that the child walking around the circle uses the word "dragonfly" in place of "duck" and "bird" in place of "goose."

Dragonfly Hide and Seek

Lastly, you may want to think about having the kids play a dragonfly version of hide and seek. It's played just like the original game of hide and seek, only with a dragonfly twist. The twist part is that the child who is "it" gets to wear a set of dragonfly wings.

White-legged damselfly © G Jarvis

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

Questions.

Guess the species from the snapshot!

1. A locally common species in Sussex. Found skimming over the water's surface and resting for long periods on regular perches, such as sticks and areas of bare ground.

2. Rare in Sussex – found in Ashdown Forest and Midhurst, where the species prefers shallow, acidic pools with good marginal and aquatic vegetation.

3. This species is common in England and Wales and locally common in Sussex. This species has a fluttering, helicopter-like flight over slow-flowing rivers and streams.

4. This early species (appearing from May onwards) is localised in Sussex and as such is listed in the *Sussex Rare Species Inventory*. Its distinctive appearance gives it its name.

5. This striking species is locally common across Sussex and favours well vegetated water-bodies. It is listed the *Sussex Rare Species Inventory*.

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 Group, 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)

By using a simple topsoil scraping technique to create variation in the micro-topography of the land surface where it has been flattened by farming, large areas of temporary and seasonal 'ponds' can be created in areas of land which have been historically drained. These seasonal ponds can be invaluable for breeding and migrating dragonflies and damselflies

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 BDS Sussex Group 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 damsel fauna
7. Report the first and last times you see individual species in each year
8. Use less water! Simple as it sounds if we use less water there is less pressure on our water resources and therefore on our wetlands that these amazing insects rely on.
9. Use eco products for washing clothes and washing up — they leave less damaging residues in our waste water and so help our winged friends by reducing pollution.
10. Look out for aliens! Not little green men, but plants: Parrotsfeather, Australian swamp stonecrop, Floating Pennywort and Water fern among others. These non-native plants when released into our wetlands can reproduce rapidly and can smother ponds and ditches etc making it difficult for dragonflies and damselflies to breed and to reproduce.

Odonata Quiz Answers

1. Male Black-tailed Skimmer
2. Male Black Darter
3. Male Banded Demoiselle
4. Female Hairy Dragonfly
5. Male Ruddy Darter

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

Contacts

Core Group

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Pond Conservation Advisors:	Jon Wood - jonwood555@hotmail.com
	Bev Wadge -ponds@sussexwt.org.uk
Treasurer:	Phil Belden - Hobhouse, 47 Arundel Street, Brighton BN2 5TH

Other useful Contacts

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

Donations

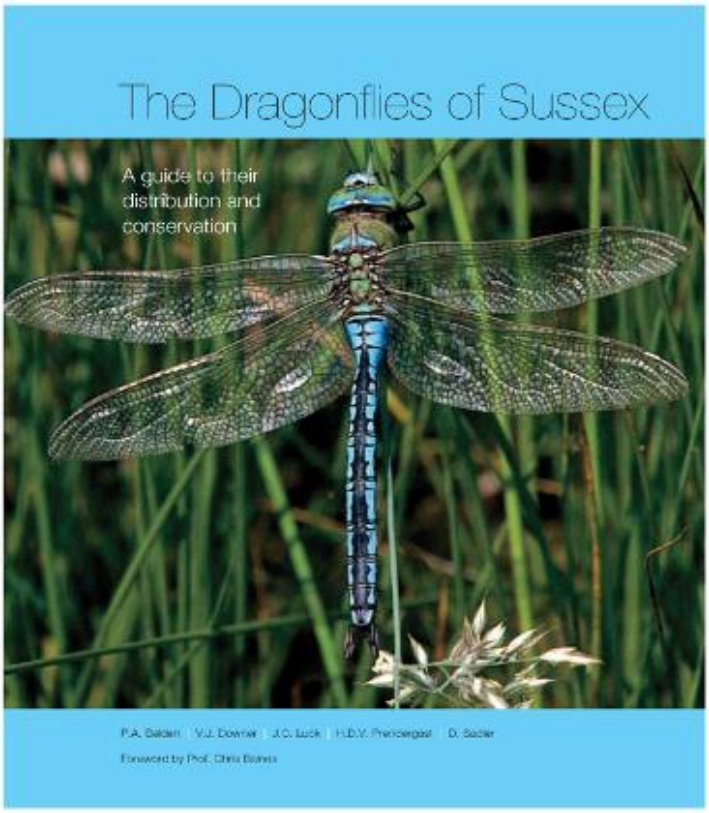
The Sussex Dragonfly Group is run exclusively with donations and proceeds from the sale of the Dragonflies of Sussex book.

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

Useful Publications

- The Natural England leaflet 'Dragonflies and Damselflies in your garden' is available as a pdf file at :- www.naturalengland.twoten.com/naturalenglandshop/docs/NE21dragonflies.pdf
- Field Guide to the Dragonflies & Damselflies of Great Britain & Ireland. S Brooks & R Lewington.
- Guide to the Dragonflies and Damselflies of Britain. Field Studies Council
- Dragonflies: New Naturalist. PS Corbet. Collins
- How to encourage dragonflies and damselflies on your land — www.sussexotters.org/wildlife/dragonflies.htm
- "British Dragonflies" 2nd edition. D Smallshire and A Swash.

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



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

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

Available from Sussex Wildlife Trust, Woods Mill, Henfield, Sussex BN5 9SD. (01273) 492630, or from good book shops (ISBN 0-9525549-1-7)
NOW JUST £5 plus post & packaging
Payable to 'Sussex Wildlife Trust' c/o Fran Southgate
Proceeds go to dragonfly and wetland conservation

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