

Spring 2018 Issue 35

Darter

Magazine

**The State of
Dragonflies
2020**

And how you can
contribute

Investigating the White-legged Damselfly
Take part in this new citizen science survey!

Welcome

Hello and welcome to the 2018 edition of Darter Magazine. We have already been busy at the BDS this year, preparing for Clubtail Count 2018 and a new survey, the White-legged Damselfly Investigation which we hope you will join us in - read on for all this and more, and have a great dragonfly season!

Genevieve

Genevieve Dalley, **Editor**



From the Record's Officer

David Hepper

Although last year I also got involved in the Dragonfly Challenge, my main focus has been in assisting our County Dragonfly Recorders (CDRs) with verifying the backlog of records in our official database, iRecord. The winter season of iRecord training courses that has taken me around the country is now nearly over, with the last in Leeds in early March. Anyone with iRecord questions is still welcome to contact me, though. We find that once the flight season starts no one wants to be indoors for a day unless there's a hurricane outside, so any further training will restart in the Autumn.

Another area of activity is the processing of data from other organisations, with imports to iRecord in process from BTO and BugAlert, among others. Butterfly Conservation import their transect records of Odonata to iRecord themselves. This means that splurges of new data arrive in iRecord for verification at random intervals and is why helping CDRs to make best use of the various shortcuts and tools in iRecord for verification is so important to me. Occasionally someone even comes across a collection of record cards from the 1990s and 2000s. As I write this, three boxes of Hampshire records from the late Chris Hill await attention. We know many are already either in our 2014 database or in iRecord but how many aren't and risk being lost? Only a systematic check will tell.

Our programme of Field Meetings offers great opportunities to recruit new recorders. Do invite your friends and look to upgrade birders, for example, to add dragonflies to their hit-lists. We don't mind whether they use the iRecord App (soon to be relaunched as a native mobile app) or desktop iRecord or even BTO BirdTrack, for example. Assure them that their records will reach us eventually. Some observers prefer to keep their records in another system, such as MapMate or Living Record, and I have processes that allow these to be bulk-uploaded easily to iRecord as pre-verified records.

Once records are verified in iRecord they become eligible for upload to the NBN Atlas. This already holds our dataset to 2014 and will become the primary retrieval. Another track of my work involves preparing our records for this upload, which should become automated by 2019. There are also bugs in iRecord and new features that our CDRs would like, so I liaise with Biological Records Centre, part of the government agency Centre for Ecology and Hydrology, to get these processed. It's a slow business but we're making progress.

With the 'State of Dragonflies 2020' project in mind, as you can see there's plenty to do. If anyone would like to assist with my work or would like to take on (or just assist) with the CDR role locally please do get in touch. We currently have several CDR vacancies, advertised periodically on the website, though we're delighted to have found several new, keen CDRs to fill gaps or replace retirees over the past year.

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The Scarlet Darter, a species common to Southern Europe, was seen in the UK for the first time in 13 years during 2017.

Migrant and Recent Colonist Update

Adrian Parr, Migrant Dragonfly Project Coordinator

It was to prove quite an eventful year for dragonfly migration in 2017, though at least some of our recent colonists had a quieter time. Many key events are described in detail elsewhere in this issue of Darter, or in Dragonfly News, but a brief summary is given here in case it helps observers plan fieldwork for the coming season.

Southern Emerald Damselfly: This species was recorded once again at its well-known site at Cliffe in Kent, and a new, but apparently well-established, breeding colony was discovered on the Isle of Wight. Elsewhere, a few isolated individuals were also reported from the East Anglian coast, including a male photographed near St. Osyth, Essex, on 7 July. Perhaps the species is now starting to gain a stronger foothold in Britain.

Willow Emerald Damselfly: After a period of rapid range expansion in southern England, 2017 turned out to be a relatively uneventful year. Although individuals showed well both in their known strongholds and at most of the sites discovered only in very recent years, there was

thus little sign of significant further expansion. Several new records did come from the Royal Military Canal area of southern Kent, but the numbers and spread of records here rather imply that the area has been colonised for some while, but it is only now that the damselflies have been discovered. Perhaps 2018 will see the species start to spread once again.

Southern Migrant Hawker: These dragonflies were well reported from their current UK strongholds around the greater Thames Estuary, with large numbers being seen at Canvey Island in particular; there was also some sign of range expansion into northeast Essex. In addition, presumed immigrants were photographed during August at Pagham Harbour in Sussex and near Minety in Wiltshire. A report from Severn Beach, south Gloucestershire, is currently also being assessed by the national Odonata Records Committee. This species is easily confused with the Migrant Hawker, and may conceivably prove to now be more widely distributed in southern England than is currently appreciated.

Vagrant Emperor: This Afro-tropical species continues to be seen with some regularity. During 2017, influxes were thus noted during late winter/



early spring and during mid/late autumn, with a few individuals also being found in summer (e.g. at Minsmere, Suffolk, and Scaling Dam, North Yorkshire, during mid July). It will be interesting to see what 2018 has in store.

Lesser Emperor: It was an above average year for the Lesser Emperor in Britain during 2017, with reports from some 35 sites. These were primarily in southern England, but there were sightings as far north as Yorkshire and one even in the Orkney Islands. Most records apparently relate to primary immigrants, though a few locally-bred individuals were probably also involved. The species seems to have been slow to colonise Britain, though some breeding sites are possibly being overlooked. It would be good to get a better understanding of the species' current breeding status in the UK.

Scarlet Darter: A male seen at Longham Lakes in Hampshire over 8–9 July was the first confirmed

UK record for 13 years. This species is however continuing to do well on the near Continent, having arrived there over the last few decades, and it indeed remains a potential colonist to Britain. Observers might like to be on the lookout for further sightings.

Red-veined Darter: The 2017 season saw some of the largest influxes of Red-veined Darter ever recorded from Britain, with records as far north as the Orkney Islands (their first ever). Locally-bred second generation individuals were widely reported from England during the autumn, though numbers were often rather low. It is possible that further emergences may take place this spring, and it would be good to check whether this indeed comes to pass. The scale of any fresh influxes during 2018 is difficult to predict at this stage, but the species has certainly become a very regular migrant to Britain in recent decades.

Images clockwise from top left: female Red-veined Darter, Male Southern Emerald Damselfly, male Southern Migrant Hawker and female Vagrant Emperor.



State of Dragonflies 2020

Ellie Colver, BDS Conservation Officer

In 2014 the BDS produced the Atlas of Dragonflies in Britain and Ireland, a comprehensive guide to the habitat and distribution of Dragonflies across the British Isles. This publication was only possible due to the survey efforts of many dedicated volunteers. However, as a result of our changing climate, and continuous anthropogenic impacts on wetlands, such as abstraction and drainage, we are witnessing rapid changes in the distribution of many Dragonfly species. Thus, the State of Dragonflies report will provide a much needed update, enabling us to understand how breeding populations of different species are performing, and identify species that require conservation action. The report will utilise all data collected via our DragonflyWatch recording scheme, including ad hoc sightings. However, in order to perform reliable trend analyses, we are urging volunteers to perform simple species lists called Complete Lists.

Complete Lists

Complete List surveys, also known as Site Lists, involve recording all the species of adult Dragonflies you see during your visit to a wetland, whether it's your local park's pond or an upland bog. That's it! The survey doesn't require you to count the number of individual Dragonflies, or record breeding information. Walk around your wetland site, checking all potential breeding areas (or as much as possible), until you are relatively certain you have spotted all species present.

Additional information you will need to make a note of includes:

- date
- site name
- OS grid reference
- site type (pond, river, ditch etc.)



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Willow Emerald Damselfly is one species that has shown rapid range expansion in recent years.

Adopt a Site

You can help us learn more about the Dragonflies in your local area by adopting a site:

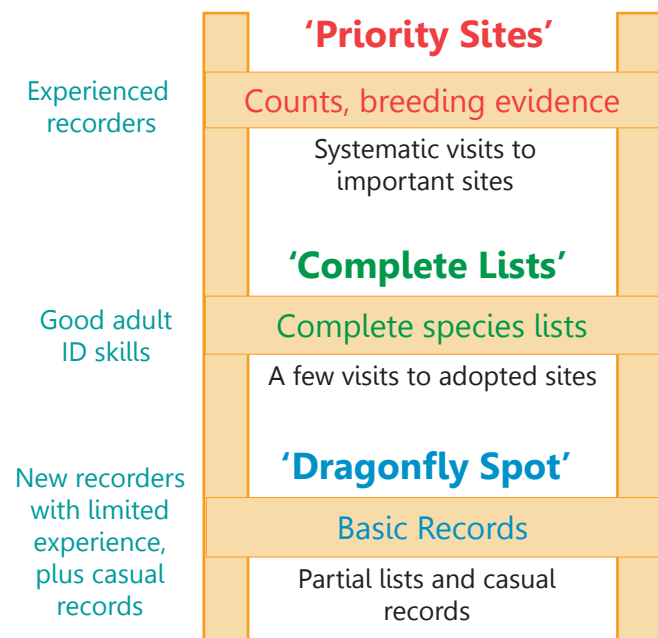
- Carrying out two to three (or more) Complete List surveys, at your chosen site, spread out between May-September, to increase your chance of recording all species breeding there.

and/or

- Repeating your survey(s) in successive years, in order to record temporal changes in your site's Dragonflies.

In short, our understanding of a site improves the more surveys you perform, and the longer you carry out surveys there. Get in touch with your County Dragonfly Recorder (CDR) before the beginning of May (contact information can be found at the back of this magazine) to let them know what site(s) you would like to survey. If you don't have anywhere in mind they will be able to advise on potential sites that will provide valuable data; for example, sites that have a high species diversity or scarce species.





The DragonflyWatch Recording Ladder, allowing recorders to develop their skills, contributing to national data sets.

Submitting Records

We encourage all records to be submitted via iRecord: www.brc.ac.uk/irecord. You can find 'British Dragonfly Society recording' listed under the 'Activities' section once you have logged on. Remember to tick the 'Recorded all species box' at the bottom of the species table (see below).

Enter a list of dragonflies (for a site on a date)

What Did You See? Where Was It?

The records you enter using this form will be added to the British Dragonfly Society recording group.

Date: 10/07/2017

Recorder Name: Dennis Dragonfly

Please enter all the species you saw at one site on a single day and any other information about them. Then move to the Where was it? tab before submitting your records.

Species	Ad	Co	Dv	La	Ex	Em	Comment	Add photos
Common Blue Damselfly								Add images
(Erythemis simplicipennis)								Add images
Broad-bodied Chaser								Add images
(Libellula depressa)								Add images
Azure Damselfly								Add images
(Coenagrion puella)								Add images
Common Darter								Add images
(Sympetrum striolatum)								Select a species first

Use * as a wildcard when searching for species names. If you have sensitive records to input please use the Enter a casual record form.

☒ Recorded all species?

If you still send your records to your County Dragonfly recorder, via other means, please make sure to note on your records that you have performed Complete List surveys.

FAQ

What weather conditions should I record in?

Choose warm, sunny, calm days for performing surveys, if you can. Dragonflies will be more active and you'll have a better chance of spotting them.

How long should I spend surveying a site? The time it takes to survey a site will depend on the size of the site and the number of Dragonfly species

present. Use your own judgement, and finish when you are confident you have identified all species present.

Will I need any special equipment? Binoculars can be a useful tool to get a closer view when identifying Dragonflies. A camera can also be useful, as you will be able to take photos of any Dragonflies you can't identify in the field. If you photograph a rare species, and uploading it with your records on iRecord, this can help your CDR verify your sighting.

I have adopted multiple sites, but I don't have much time to survey them. How should I split my recording effort between the sites?

Example. You have 2 sites, called A and B, but you only have time to do 4 surveys a year:

Conduct 3 visits to site A and 1 visit to site B. The next year conduct 1 visit to site A and 3 visits to site B, and so on. . .

- Conduct 2 visits to site A and 2 visits to site B.
- Conduct 2 visits to site A and no visits to site B.
- The next year conduct no visits to site A and 2 visits to site B, and so on. . .

I think I've found a rare/scarcely species on the site, but I'm not 100% sure. What should I do?

Don't submit a record for a species unless you are sure you have identified it correctly. If you find uncommon species in the field try and get a photo of it, so you can check the identification later. You have the option of uploading photos with your records on iRecord; this helps your CDR verify that you have identified species correctly.

Would it be useful for me to recording additional information on abundance and breeding?

If you feel confident in doing so please feel free to record the abundance of Dragonfly species (individual counts) and breeding behaviour (copulation, oviposition, larvae, emergence, and exuviae sightings) during your surveys. This information can be very valuable in assessing whether your site holds healthy breeding populations.

Variable Damselfly has scarce, localised populations which need to be targeted in order to produce reliable trend analyses.



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A male White-legged Damselfly: pale blue with limited black abdomen markings and pale broad feathery legs

The White-legged Damselfly Investigation: Find those Featherlegs!

Ellie Colver, BDS Conservation Officer

Over the past year or so a number of our recorders have come to us with a worrying observation; White-legged Damselfly appear to be disappearing from numerous river systems and wetlands all over the south of Britain

If you live in the South of England or South Wales you might have spotted this fragile Damselfly quivering through the air around the edges richly vegetate rivers, streams, and water bodies. Or, you might have been lucky enough to come across assemblies of them hunting through the grasses of riparian meadows or pastures on warm sunny days. However, whether you will have recognised this species is another matter!

The White-legged Damselfly's pale cream (females and immature males) or blue (mature males) coloration, means that it is often mistaken for the immature forms of other, more common blue Damselfly species, like Azure Damselflies. However, as any experienced recorder will know, it can be easily told apart once you know to look out for its feeble black abdomen marks and those iconic pale legs, which in males, are broad and feathery.

White-legged Damselfly are notoriously under-recorded, a problem that is probably related to its inconspicuous appearance, and our lack of long term datasets for the species means it's difficult to truly assess changes in the species' population trends and distribution. As a result, The White-legged Damselfly Investigation aims at increasing awareness of this species both within the recording community, and the wider public, encouraging the

reporting of sightings, particularly in under-recorded areas. In addition, we will be setting up a long-term recording scheme to more accurately assess changes in White-legged Damselfly populations. Thanks to our County Dragonfly Recorders we have already identified areas where this species appear to be declining, for example, since 2014, White-legged Damselfly have been reported to be declining in many parts of Suffolk, apart from a few core areas on the River Stour. Our County Dragonfly Recorders have also assisted us in identify particular areas where the White-legged Damselfly are under-recorded, such as on the Avon between the Mendips and Bristol, which we can target in the future.

If you'd like to find out more about the project, and how to get involved please visit the British Dragonfly Society website, or contact our Conservation Officer Eleanor Colver.

Email: eleanor.colver@british-dragonflies.org.uk
Tel: 07792 231 925

Females are creamier in coloration, with some black marking and thinner, pale legs.



Clubtail Count 2017 Results and Clubtail Count 2018

Genevieve Dalley, Clubtail Count Project Coordinator

Last year, the BDS ran the new citizen science survey, Clubtail Count, for the first time. The survey proved a great success, leading to some important discoveries and challenges for the future.

Clubtail Count is a national citizen science survey which aims to gain a greater understanding of the distribution and status of the Common Clubtail Dragonfly in England and Wales. This species, despite its name, is elusive and declining, with limited data preventing focussed conservation action to improve its outlook. The survey assigns monads to particular volunteers, with at least three visits between May and July.

We were thrilled to have a fantastic response from everyone to the announcement of Clubtail Count. A whopping 110 volunteers was the final number to join in with this national survey. A total of 15 rivers were surveyed, stretching from the river Dee in the North west to the river Arun in the South east. Volunteers managed to survey a grand total of 206 monads (1km² map grids). A staggering 954 new Clubtail records were made in total with 72% of these exuvial records. These are the most valuable type of records, as they indicate exactly where the species achieved its full lifecycle. 91% of records were made in May. This is unsurprising, as the species historically predominantly emerged in May and is known to emerge en masse.

Of all monads searched, 53% were found to contain the Common Clubtail dragonfly. The river Severn supported the greatest number, with 60% of records from this river. This was also the river with the

greatest proportion of positive monads (monads with Clubtail found in). The river Vyrnwy also proved a success. Historically, only adult Clubtails had been found in the vicinity of this river. These could have flown from the nearby River Severn so proof of breeding was an important aim of Clubtail Count 2017. Happily, 12 exuvial records were made on the river Vyrnwy, with Clubtails found as far upstream as Llanymynech.

Unfortunately, it was not all good news. The river Avon, on which populations in Warwickshire are known to have crashed since 2010, was found to have no Clubtails at all, from near Evesham down to the confluence with the Severn. This is very worrying, but we need more data to understand why. Additionally, no Clubtails were found on both the rivers Teifi and Towy, although access was very difficult on both. Kayakers searching for Clubtails in 2018 would be a great help here.

Excitingly, an additional sighting was made on the river Otter, in Devon by Paweł Buczyński. A single adult was seen here, a significant distance from any known population. Breeding evidence, from exuvia, is the next vital step for this river.

The full report can be found on the BDS website. We would like to thank David Tompkins, the co-ordinator of Clubtail Count 2017, for all his fantastic, hard work last year. As David's other commitments have increased, he has passed the baton on to me.

It is not too late to join in with Clubtail Count 2018, on the Rivers Severn, Vyrnwy, Dee, Teme, Avon, Wye, Thames, Kennet, Arun, Rother, Teifi,

Towy and Otter. Visit the BDS website to choose a monad or email me for more information on: genevieve.dalley@british-dragonflies.org.uk
Happy Clubtail Counting!



Top: Clubtail monad on the river Dee;
Middle: newly emerged Clubtail dragonfly with its exuvia; Bottom: the river Otter, a potential new river for the Common Clubtail.



Investigating the White-faced Darter

Rachel Davies, University of Chester

Throughout 2017, a 6 month research project investigating the White-faced Darter dragonfly populations in Cheshire and Shropshire was carried out, at Doolittle Moss, managed by the Forestry Commission and Cheshire Wildlife Trust, and Fenn's, Whixall and Bettisfield Mosses NNR (FWB Mosses), managed by Natural England

The White-faced Darter has been facing a decline in Britain over the past several decades due to land-use changes, which have caused fragmentation of its specialist lowland, raised peatbog habitat. Because of this decline the White-faced Darter has been classified as endangered on the Odonata Red Data List for Britain, and has been involved in two British reintroduction attempts within the past decade.

Due to its conservation status, this species became the focus of my Masters by Research and in 2017, investigating the species throughout its various life stages. The majority of research was carried out at recent reintroduction site, Doolittle Moss in Delamere Forest, Cheshire. The reintroduction project, carried out by Cheshire Wildlife Trust, was the second White-faced Darter reintroduction carried out in Britain, and it began in 2013, with the final year of egg and larvae translocations taking place in 2016.

The primary aim of the research was to investigate the habitat use of the White-faced Darter. We used several techniques to monitor the population at Doolittle Moss, including adult transects, exuviae transects and larval sampling. At FWB Mosses we carried out a Capture, Mark, Release (CMR) study and further larval sampling to compare this technique between the two sites. The secondary aim of the research was to create a post-release monitoring protocol for odonate reintroductions. This was proposed as, due to the nature of the Doolittle Moss reintroduction site, post-release monitoring had proven difficult. It was hoped that through this research we would be able to trial a variety of monitoring techniques to find which methods were most effective.

Low numbers were recorded throughout the duration of the research period at Doolittle Moss, with only 14 exuviae, 2 larvae, 1 teneral, and 5 adults being recorded. Low numbers were also recorded at FWB Mosses during the CMR with only 50 adult White-faced Darters being marked, of which 41 were males, 9 were females. An additional 254 individuals were sighted during the CMR but were not captured. A further 74 White-faced



A marked male White-faced Darter recorded during the capture, mark, release at Fenn's and Whixall Moss.

Darter individuals of varying larval stages were recorded at FWB Mosses during the larval sampling. Sampling techniques had variable levels of success between the two sites. Larval sampling proved very difficult at Doolittle Moss due to the size of the reintroduction pool, and the available access. In comparison, it was very successful at FWB Mosses, where pools are much smaller and have greater access. Access constraints meant exuviae searches also proved difficult at Doolittle Moss, but gave better results compared to larval sampling as only the emergent vegetation needed to be searched. Although exuviae searches were not carried out at FWB Mosses during this study, previous work carried out by Cheshire Wildlife Trust showed this technique to be very successful here, again due to the ease of access to the pool edges. Throughout the research period the low numbers recorded, both at Doolittle Pool and at FWB Mosses, made it difficult to investigate the habitat preferences of the White-faced Darter.

Repetition of the sampling techniques showed that the methods used could work well to monitor numbers of White-faced Darters with some small changes. We found fixed-point larval sampling depletes sphagnum moss over time. In future, we would recommend random larval sampling points. Secondly, we recommend increasing the number of exuviae transects at sites which are difficult to monitor through other methods, as they provide a reliable estimate of larval populations. Adult transects are a well-used technique for monitoring odonate populations, however they are limited for large water bodies because standard BDS guidelines state that a transect should only search up to 5m over the water body. As a result of this, adult transects at Doolittle Moss were unsuccessful; the large size of the pool resulted in only a small percentage of the water body being covered. Therefore, thirdly, we would recommend adding fixed-point transects to monitor any rare odonates where the size of the pool is too large for adequate coverage through standard transects.





An egg laying Brown Hawker, taken at Mile End Park by Dragonfly Detective, Agostina Campodonico

Engaging London's Dragonfly Detectives

Petra Sovic Davies, Water for Wildlife Project Manager, London Wildlife Trust

One of the programmes currently run by London Wildlife Trust is Water for Wildlife, a four year adventure focused on the conservation and restoration of freshwater habitats across the capital. Our small, hard-working team is working with a range of partners and land managers to influence how rivers, streams, lakes, reservoirs and ponds in London are perceived, valued and managed. We contribute to the work of catchment partnerships in order to improve the ecological potential of London's rivers; we scope and design pond and riverine habitat restoration projects; we organise volunteering sessions to deliver practical improvements and we work with contractors on larger projects – all of this enabled with funding from Esmée Fairbairn Foundation and Thames Water.

For the majority of our volunteers, the most exciting part of our programme is Dragonfly Detectives, the citizen science Odonata recording initiative. We are trying to map out the distribution of dragonflies and damselflies across London, and rely on a team of enthusiastic volunteers to gather the data.

There is a wealth of species data already available, collected by several experienced recorders and held by Greenspace information for Greater London

(GiGL) – the capital's environmental records centre. However, the data distribution is patchy, and while some sites benefit from intense long-term monitoring, large areas appear to be undiscovered. London has over 600 kilometres of rivers and streams and almost 2,000 ponds in public open spaces.

Surveying dragonflies and damselflies on such a scale is not an easy task, but with help from our Dragonfly Detectives we are planning to bridge the gap in the data. By the end of 2019 we intend to publish the first atlas of Odonata for Greater London. Since the start of the survey programme in 2016, our volunteers have discovered that some of the species have wider distribution than records indicated. One of them is Willow Emerald Damselfly, which was discovered in Hackney,

Dragonfly identification training at Camley Street Natural Park, London.



© Marta Rana





Banded Demoiselle at Woodberry Wetlands, taken by Dragonfly Detective, Chris Farthing

Richmond Park and Thamesmead in significant numbers. This recent colonist from mainland Europe is increasingly showing up in surveys, following its first appearance in London in 2013 (based on the available GiGL records). However, some widely distributed species have also been creating impressive displays - one of the most remarkable sights was 54 Common Blue Damselflies fluttering along the wet ditch at Frays Farm Meadows, one of the Trust's reserves near Uxbridge.

As dragonflies and damselflies are such iconic insects, capable of capturing people's interest, we have developed an online recording scheme for Dragonfly Detectives that allows anyone, without specific identification knowledge, to submit their records. The questionnaire allows flexibility, so that inexperienced recorders can submit descriptions and photographs, rather than trying to identify specimens to the species level (although complete species records are more than welcome).

As expected, our online survey suffers from the same problem as any scheme collecting data from a lay audience, especially when information is submitted electronically and without direct communication with the recorder – the data reliability can be patchy. All the records go through a rigorous verification process: photographs (even if a bit blurry) are of huge help in this process, as well as information such as physical description, flight pattern, behaviour and location. We are especially cautious over records of very similar looking species such as Common and Ruddy Darters, and some of the blue damselflies. A surprising thing that we learned was that common names can be very misleading – many of the reported Brown Hawkers were actually female Common Darters, while a whole range of species was reported as a Hairy Dragonfly – especially when people noticed the obvious setae on dead specimens. Checked records are then forwarded to GiGL, where they undergo further verification.

Over two survey seasons we have received a

large number of records of what are perhaps the more noticeable species in urban settings: Emperor Dragonflies are difficult to miss with their determined flight often along busy roads, Common Darters are happy to rest on garden furniture and Southern Hawkers seem to fly deliberately into kitchens and conservatories. We discovered that ponds in private back gardens can support dozens of emerging individuals and ovopositing in flower pots is not that uncommon. We heard how exciting it is to observe a Brown Hawker flying while enjoying a drink in a riverside pub. The lively descriptions submitted through the survey demonstrate that the main benefit of Dragonfly Detectives is creating curiosity about the natural world and engaging participants with the green spaces around them.

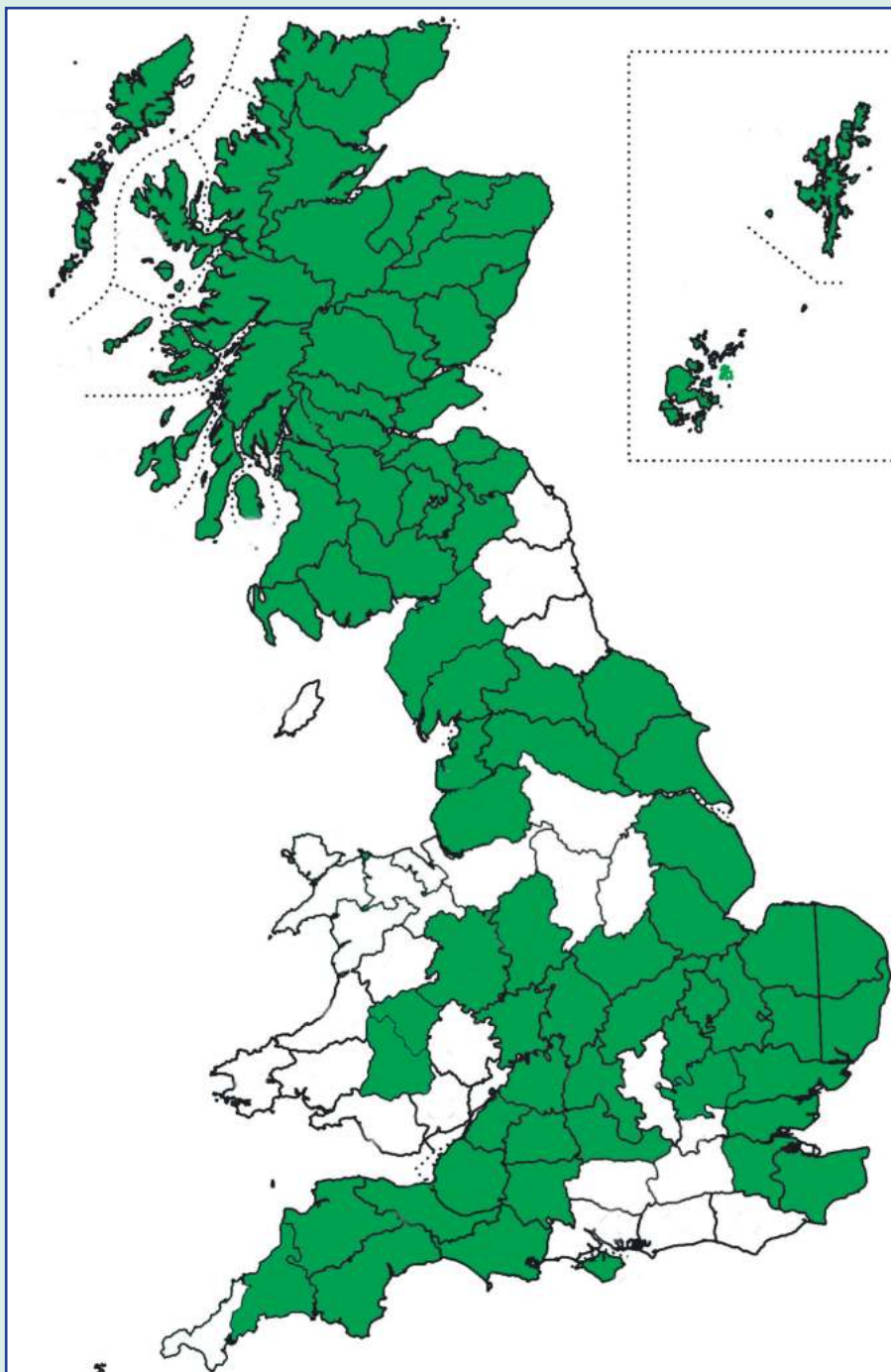
This coming season we will continue surveying London's open spaces for dragonflies and damselflies. The emerging atlas still has data gaps that we wish to investigate (as the locations cannot be completely devoid of Odonata) with further help from our volunteers surveying their favourite local green spaces. As for Dragonfly Detectives, we are hoping for a new flurry of records to hit our online database. You can get involved by joining the team this summer for ID training and survey sessions across London; and help with data collection for the London Odonata atlas by submitting your sightings via Dragonfly Detectives.

The Water for Wildlife team are very grateful to Neil Anderson and Steve Brooks for helping our volunteers to develop their Odonata ID skills, as well as confirming the records based on less-than-perfect images.

Dragonfly Detectives survey can be accessed at www.wildlondon.org.uk/dragonfly-detectives For more information see www.wildlondon.org.uk/water-for-wildlife or follow this London Wildlife Trust project on Twitter @WaterForWild

Southern Hawker, taken by Dragonfly Detective, Diane Murphy





Vice county map. Vice Counties for which 2016 accounts have been written are coloured in green.

Cornwall - VC 2

David Cooper

As usual the Odonata season started reasonably early again with **Large Red Damselflies** appearing end of March-early April, although I realised that numbers were somewhat less than the previous two years. I also found that the males were emerging in advance of the females which has not happened in the past two years. Generally the first dragonfly to emerge is the **Four Spotted Chaser**; this also bucked the trend this year

with the **Broad-bodied Chasers** beating them by around eight days. These observations were made in the Carnon/Bissoe Valley, a site I have visited very often for seven years.

The highlight of the season for me had to be the sighting of a female **Vagrant Emperor** on a wasteland in Falmouth on the 25th of March. Unfortunately I was not expecting to see any dragonflies this early and I did not have my camera. However on October 2nd I did photograph a **Vagrant Emperor** (female) at the same

site, which throughout the season proved to be an excellent site for Odonata with eighteen species photographed and recorded among them notably **Scarce Blue-tail Damselflies**, **Small Red Damselflies** (dark version included) plus a male **Red Veined Darter**.

I have very recently taken on the role as County Dragonfly Recorder (CDR) for Cornwall East (Truro to Tamar) and I am very much looking forward to receiving your sightings this coming season. I would also like to hear from members in this area and their feelings regarding organised Odonata trips 'locally' and maybe a meeting or two?

Looking forward to a bumper season 2018.

Devon - VC 3 & 4

Dave Smallshire

The spring started with "a large unknown dragonfly" in Exeter on 7th April, followed by a presumed female/immature **Vagrant Emperor** at Mansands Beach next day. Coinciding with an influx of this species more widely in April, it is likely that the Exeter individual was also a Vagrant Emperor, although **Hairy Dragonfly** cannot be ruled out in early spring. It was not until 14th May that Hairy Dragonfly was reported, at Dart's Farm ponds, Topsham. In the following three weeks, more were seen along the Grand Western Canal (up to 6), Exeter Canal, Stover and Little Bradley Ponds.

The main spring emergence was apparent by late May, with **Red-eyed Damselflies** at Exeter Canal, Grand Western Canal (up to 23), Little Bradley Ponds (where rare), Stover and nearby Ventiford Ponds (good numbers). **Downy Emeralds** were also in evidence around this time, with records from Bystock and Little Bradley Ponds (up to 6, with a late one for Devon on 17 July). **Scarce Chasers** emerged a little late, the best numbers being seen along the Grand Western Canal (37 on 13th June), with



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Migratory Vagrant Emperors, like this female, were seen in Cornwall and Devon in 2017.

others at known sites at Lower Bruckland Ponds (up to 10) and Exminster Marshes; nearby sightings at Dart's Farm (evidence of breeding) and Double Locks, Exeter Canal, indicate that breeding might be occurring beyond the drains of Exminster Marshes. More surprising was a fresh-looking female Scarce Chaser on the fringe of Dartmoor at Buckfastleigh on 23 June, well away from any known breeding sites.

The Soar area saw a series of **Red-veined Darters** during 25th May - 2nd July, probably involving at least five different individuals. Another was seen at Bovey Heathfield on 5th July. Another likely disperser was a **Keeled Skimmer** on the cliff top at West Soar on 31st July.

Southern Damselfly peaked at only nine at Colaton Raleigh Common, where **Small Red Damselflies** peaked at 16. There were better numbers of the former than last year at Aylesbeare Common (115) and Venn Ottery Common (62), although Dartmoor numbers are said to have been down on last year's (details still awaited); seven were still flying at Prewley Moor on 15th August.

A visiting Polish entomologist found two rarities during July, with first a **Lesser Emperor** flying in Mill Street, Ottery St Mary on

the 15th and then the first record for Devon of a **Common Clubtail** along River Otter near Tipton St John on the 18th. The latter has not been recorded closer than Gloucestershire previously, so the origin of this individual is uncertain.

In July, **Small Red-eyed Damselfly** was recorded west of Exeter Canal for the first time, in the Bovey Basin at Little Bradley Ponds (42), Ventiford Ponds (eight) and at a pond near Kingsteignton (two), with evidence at breeding at all these. Finally, at the end of the season, a late male **Emperor Dragonfly** was at Dawlish Warren on 3rd October.

Somerset - VC 5 & 6

Chris Iles

2017 seemed to be a reasonable year for Somerset's dragonflies. There were reasonable numbers on the wing and, although not especially an outstanding year,

The White-legged Damselfly had a good season in Somerset in 2017.



© Christophe Brochard

there was at least one notable occurrence – the possible colonisation of Priddy Mineries by **Keeled Skimmer**; there were several records of multiple individuals and oviposition. This follows a single record at this well-watched site in 2014. Although the species was known from elsewhere in the Mendips in the 1990s, it has not been recorded in this area for some years and it would be good to know where they came from – is there an undetected site somewhere else in the region? Keeled Skimmer seemed to have a good year, this scarce and local species being reported from a number of sites on the Quantocks and Exmoor as well.

Another species to do well was the **White-legged Damselfly**; wherever it was reported, its numbers seemed to be considerably higher than in recent years. Sightings of **Golden-ringed Dragonfly** in the east Somerset woods (Barry Watts) and good numbers of both **Emerald Damselfly** and **Black Darter** on Exmoor (Will Langdon) were also encouraging.

Two areas are very much under-recorded at present, and dragonfly records from these areas would be especially welcomed – the North Somerset Levels between Bristol and Weston-super-Mare, and the Yeovil/Wincanton area. The former in particular holds some fine dragonfly sites in the Gordano valley and just behind the coast that must be well worth a visit.

Wiltshire – VC 7 & 8

Steve Covey

For most species, 2017 proved to be an average year for both the numbers seen and the locations at which they were recorded. There were one or two notable highlights however!

The year got off to a reasonably early start with **Large Red Damselfly** being seen by Helen Rice on the By Brook [VC7] on 6th April and by Lorraine Blakey in her Salisbury [VC8] garden on 9th. The first dragonfly followed quite quickly with **Broad-bodied Chaser** on 11th at Cadnam Common Pond [VC8] by Derek Jenkins and **Downy Emerald** photographed emerging at Lower Moor complex, Cotswold Water Park (CWP)[VC7] on 21st by Steve Birt.

New species for the year then appeared at regular intervals through the season with the latest sightings being of **Southern Hawker** on 20th October at Market Lavington by Gareth Harris, **Common Darter** on 5th November at Sandpool, CWP by Neil Pullen and finally a **Migrant Hawker** on the edge of Seagry Wood on 8th November by Martin Buckland. Several species had particularly successful seasons. **Hairy Hawker** appears to be consolidating its position in the Lower Moor area of CWP with many more sightings of both males and females, including mating behaviour.

Small Red-eyed Damselfly appears to be expanding its range a little too. This year it has been discovered on the lake at Stanton Park on the edge of Swindon by Nick Nettleingham on 27th July and has appeared to have colonised the Wilts and Berks canal between Swindon and Royal Wootton Bassett with sightings [by Steve Birt and myself] all along that stretch which has been restored and flooded but not in use yet for boat traffic. Mating behaviour was noted at both locations. A single male was also seen by myself at Ravensroost Meadow Ponds on 6th August



© Damian Pinguey

The blue colour form female Southern Migrant Hawker, photographed at Ravensroost Meadow Ponds, Wiltshire, in 2017.

– another new location!

Golden-ringed Dragonflies have been seen again in several places between Calne and Chippenham associating with small streams on the greensand outcropping. Also in Bentley Wood [including Sue Walkers garden!] near Salisbury – not that far from the New Forest population.

Beautiful Demoiselle continues to spread into further atypical locations and is now becoming almost as widespread as **Banded Demoiselle** in the county!

On 20th June at Coate Water Country Park Tony Martin, a local birder, photographed a mature male **Red-veined Darter**. Helen Sly saw it or another at the same location the previous day. These are the only sightings for this species in the county for several years!

The most exciting discoveries for the county this year however are as follows. **Scarce Chaser** finally achieved proof of breeding status in Wilts when Steve Birt found an exuvia on the margins of one of the turning ponds on the Caen Hill flight of locks on the K & A canal at Devizes on 11th May! I visited on 14th and found a

further 2 exuviae. In mid-June several mature males were noted holding territory there, all with abdominal mating scuff marks. We just need to find them on the Bristol Avon now, their main population location. Additionally, Steve Cham found between 6-20 **Small Red-eyed Damselflies** on a small lake in Westbury on 9th July. This is another new location for this species and the only current one for VC8, all the others being in the general area in and around Swindon.

Last but not least, Damian Pinguey visited Ravensroost Meadow Ponds near Minety on 5th August where he found a stunning blue form female **Southern Migrant Hawker** – the first of that species for Wiltshire and the first of that form for the UK!!! He also got some superb shots of her but sadly she didn't stay for others who went looking the following day [including myself]. Finally, as always, a huge thanks to all those who took the time to record and send in their sightings; please keep up the good work. More details and additional images can be found on our Facebook group at: <https://www.facebook.com/groups/441544116004916/>

Dorset – VC 9*Andrew Brown*

Hello from the still beautiful Dorset! I badly hurt my ankle early in spring of 2017 and could barely walk anywhere for months and this really curtailed any personal dragonfly activity for me for most of the summer, so I thank everyone who managed to get out there and record...

This year I just want to focus on a couple of sites. At Tadnoll and Winfrith Heaths, two Dorset Wildlife Trust reserves, a new project looking at dragonflies was created by Fen D'Lucie. She was who was one of the citizen scientists who volunteered for the 3 year Cyril Diver Project and who I helped to train in dragonfly identification. She was and is fantastically enthusiastic about recording dragonflies and took that experience to develop her skills and its great to see new recorders moving forward and taking on their own projects!

In the first season 16 species have been recorded as adults including a new colony of **Scarce Blue-tailed Damselfly** which as everyone knows are easily overlooked and a very 'mobile' species turning up in some years and not others. Pond dipping will be introduced this year and exuviae searches to establish breeding records. I wasn't able to get out there last year but this year will certainly be getting out there to these wonderful heathland sites.

Another site which has caught

A stunning, rare, Scarlet Darter was seen at Longham Lakes, Dorset, in 2017.

my attention and one I had never visited before is Longham Lakes, which has been made famous by local birder Dominic Cousins. Why I had never visited this site before is beyond me as its actually in the conurbation of Bournemouth/Poole where I live! Its a small site consisting of 2 former gravel pits, now small lakes, fringed with reed beds and managed primarily for coarse fishing. On paper then a site that would sound not very promising for Odonata with all those hungry fish! So far I have not got a total list for the site, though trying to assemble one as I think this site will be rather special. On a single day alone last year 16 species were seen, including **Small Red-eyed Damselfly**, **Scarce Chaser**, **Lessor Emperor** (3), **Red-veined Darter** (6) and the magnificent **Scarlet Darter**, which many at the BDS got very excited about. I must confess I actually went to the site courtesy of a friend who helped me hobble around with my bad ankle, hoping to see the Scarlet Darter, but it had moved on!

Next year I will undertake a few more visits and doing a guided walk at Langham, its always nice to discover new sites on ones doorstep. Other good news is the Red-veined is probably breeding here as coupled pairs spotted and photographed as see below All are welcome to Dorset, especially Alan Nelson!

Isle of Wight – VC 10*Jim Baldwin*

2017 was a notable year, both for the county and me. After taking

over as county recorder in March I did not expect to be reporting on a new species, and breeding record, for the county two months later.

Southern Emerald Damselfly

became the 35th species to be recorded on the Isle of Wight when ten mature and immature individuals were seen by Peter Hunt at Bouldnor on 25th May, exactly nine years to the day that the previous new species for the county had been seen. Further investigation revealed that the species had been present since at least 2015. For a fuller account, please see Dragonfly News 72:21.

Generally it appeared to have been a better year than 2016 for most odonata in the county with 24 species recorded. Emerging **Large Red Damselfly** was first seen at Totland, East Cowes and Ventnor on 9th April, the earliest date since 2012.

A teneral Small Red-eyed

Damselfly was seen at a private pond in Shalfleet on 20th June, the earliest reported date for this species in the county.

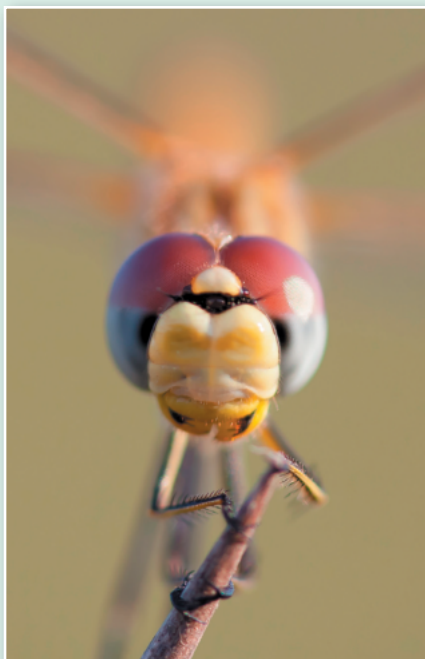
The small populations of **Downy Emerald** and **Scarce Chaser** remain at their private sites in south-east Wight while **Keeled Skimmer** was sighted at its two regular sites at Blackgang Terrace and Rocken End, Niton.

The large influx of **Red-veined Darter** to the UK resulted in sightings of a male at Ventnor Downs on 24th May, followed on 28th by a female at Ventnor revetment and two males at Atherfield. Eight were present at Atherfield on 31st with a further two seen at Compton Pond the following day. Finally 9 were recorded at Atherfield on 18th July.

Last record of the year was 20+ **Common Darter** at Brading Marshes on 16th November.

Thanks to everyone who submitted their records and photographs during the year.





A large number of Red-veined Darter were recorded on the Isle of Wight in 2017.

Kent – VC 15 & 16

John and Gill Brook

Due to the exceptionally early, warm spring, our first sighting for 2017 was the **Large Red Damselfly** on 7th April when two teneral were seen and 19 exuviae were collected.

The **Southern Migrant Hawker** was observed at three new locations in north Kent and ovipositing was seen at one of the sites. Fewer adults and exuviae of the **Southern Emerald Damselfly** were found than previously at their usual site at Cliffe but a further site was discovered on the Grain peninsula.

Unfortunately, fewer numbers of the **Dainty Damselfly** were seen and only eight exuviae were found. It was only recorded at one site as at the other site the ponds had completely dried up due to the hot dry summer which we had in Kent. Hopefully, following the very wet winter, the Dainty Damselfly will come back to the second site.

There was a new record of the **Scarce Chaser** at New Hythe Lakes from Terry Laws and friends. One was also seen for the first time at Scotney Castle.

After a phone call from Bernard Boothroyd in August informing us that the **Willow Emerald Damselfly** had been seen along a dyke parallel to the Royal Military Canal, we met up with Bernard and friends to see exactly where they were. We were taken along the dyke where numerous individuals were seen. I decided to look along the edge of the canal as it looked more suitable for breeding and immediately found a pair ovipositing in an Ash tree. Closer inspection revealed about a dozen pairs ovipositing in the same tree and more were found further along the canal. Another visit was made the next day when we found the adult Willow Emerald Damselflies and/or the egg laying marks at every part of the canal where the roads crossed it. We then decided to check as many suitable water bodies and rivers all over Kent adding a further 31 records. With the help of others, we now have a total of 51 tetrads for the Willow Emerald. Some of the records were just the egg laying marks on the trees which were mainly Ash, Grey Willow and Goat Willow. We hope to continue surveying under recorded areas of this species in 2018.

Essex – VC 18 & 19

Neil Phillips

Having recently taken over as Essex recorder I do not have all the records, but based on the information I have the first odonata records for the county were 2 **Large Red Damselflies** on Benfleet downs spotted by Ian Dew on 9th April.

The one colony of **Downy Emeralds** in Epping Forest persists, with 5 seen by Jason Mule on 26th May.

Alan sheering reported a **Lesser Emperor** at Marsh Farm CP, South Woodham Ferrers on 19th June, and a second was seen by Jason Mule at Long Running, Epping Forest.

At least 12 teneral **Red-veined Darters** were recorded at Hanningfield Reservoir on 19th

July by John Bright.

Southern Migrant Hawker, continues to have it's UK stronghold in South Essex and was first seen in the county Marks Hall Estate, Marks Tey a single male on the 2nd July by Steve Jellett. A week later at a ditch at RSPB West Canvey Marshes very good numbers of 30+ males (the most seen on in the UK ever) was reported by Tim Caroen 9th July, with double figures reported on many of the following days. It also turned up at many of the regular sites. The last records for the year were at the Canvey site on 14th August by Harvey Tish. This species certainly looks set to stay.

The **Scarce Emerald Damselfly** appears to have disappeared from Wat Tyler CP, a previous reliable site, but there were good numbers seen in suitable habitat on the nearby South Essex RSPB reserves.

Another recent arrival, the **Willow Emerald Damselfly** continues to do well in the county, but there were no sightings of the **Southern Emerald Damselfly**.

A **Common Darter** on 27th October at Chigborough Lakes EWT by Steve Jellett was the last

Willow Emerald Damselfly ovipositing in Crack Willow at Bysing Lake, Faversham



odonata record in Essex for 2017.

Hertfordshire – VC 20

Roy Woodward

During 2017, Odonata were flying in Hertfordshire between 9th April, when the first **Large Red Damselfly** was seen at Little Mile Wood, and 17th November, when the last dragonfly of the year was a **Common Darter** at Tyttenhanger GP.

Willow Emerald Damselflies

continue to be seen at several sites in the east of the county and were found at a few four additional sites, including Tyttenhanger. This species has now reached counties further west so could potentially be found in suitable habitat anywhere in Hertfordshire.

Scarce Emerald Damselflies

were again found in reasonable numbers at Hertford Heath and other scarce species also showed continued presence at sites from which they had been recorded in previous years, suggesting that at least some of these had bred successfully in the county, although there was no confirmation of this.

At least one male **Norfolk Hawker** was seen at Amwell NR between 13th & 19th June, the third year running that the species has been recorded at the site, and 1 or 2 male **Scarce Chasers** were also seen here, two years after the

sites first records in 2015. Scarce Chasers were also again present on the Grand Union Canal near Wilstone.

Up to 4 **Lesser Emperors** were seen at Hilfield Park Reservoir between 13th June and 9th July, including an ovipositing pair on the last date. The same site also produced records of **Red-veined Darters** between 25th May and July 17th, with a maximum of at least 6, including an ovipositing pair, on 26th June. Despite a good influx of this species into the country, the only other Hertfordshire site that produced records of Red-veined Darters in 2017 was Tyttenhanger GP, with singles seen between 23rd & 26th June.

Finally, **Downy Emeralds** were again seen at Tyttenhanger GP, with two males on June 10th and singles on 14th and 18th.

Berkshire – VC 22

Mike Turton

Decent weather let to an early start to the 2017 flight season, with records of **Large Red Damselfly** on 5th April, possible **Beautiful Demoiselle** on 18th, **Common Blue Damselfly** on 19th, **Banded Demoiselle** on 21st, **Azure Damselfly** on 23rd, **Blue-tailed Damselfly** on 22nd and **Red-eyed Damselfly** on 24th. Several of these dates were the earliest on record for Berkshire. There was a marked downturn in

July with torrential rain ushering in a period of unsettled weather for the next two months. This seems to have affected dragonfly numbers, for instance only two counts in this period for Common Blue Damselfly exceeded 100.

The end of the flight season also produced a new record date, this time the latest date recorded for **Ruddy Darter** on 25th October. However the season appeared to finish earlier than normal for several species, including **Four-spotted Chaser**, **Small Red Damselfly** and **Common and Black Darters**.

There were fewer sightings of **Downy Emerald** this year, but records indicate a good year with a maximum count of 19 from Decoy Heath, a site undergoing regular monitoring. Four-spotted Chaser also appears to be recovering from two poor years with an increase in both the number of records and maximum count. In contrast **Hairy Dragonfly** was only recorded at 10 sites with a maximum count of 2, fewer than in previous years.

After disappearing from Decoy Heath last year, **White-legged Damselfly** reappeared in 2017, although with counts still in single figures. However at nearby Paices Wood it seems to have had a poor year, with numbers at their lowest since site records began.

There was just one 2017 record of **Red-veined Darter** from the usual site at Crookham Common, with a single adult male on 1st June, together with a male **Lesser Emperor**.

Thanks to all who submitted records in 2017.

Oxfordshire – VC 23

Stephen Burch

In VC23, the 2017 season started well with good Odonata conditions. The first record, from RSPB Otmoor, was of a **Large Red Damselfly**, on the early date of 19th April. An early **Hairy Dragonfly** was also recorded from the same site in April. This

Scarce Emerald Damselflies were found in good numbers again in Hertfordshire in 2017.





© Sankar

A male Lesser Emperor was recorded in Berkshire in 2017.

species continues to expand its range with a new site record this year from the Trap Grounds in Oxford. There were also a good number of reports from RSPB Otmoor – its stronghold in VC23.

Much of the early season focus was however on **Common Clubtails** and several recorders took part in the BDS Clubtail Count. Although there were reports of reasonable numbers of exuviae from the traditional site on the River Thames of Goring Railway Bridge, only a few exuviae were found downstream from Goring, and none were located upstream. Adults were found in only about 6 different 1km squares on the VC23 side of the river. Of these, only 1 was upstream of Oxford (at Tadpole Bridge). There was a notable late record of one ovipositing at Streatley on 5th July. Overall, the survey appeared to confirm how elusive this species has become here.

Surprisingly, the Clubtail Count did not lead to a boost in records of **White-legged Damselflies**, perhaps because their peak flight season is slightly different. There were however about 15 between Goring and the Railway Bridge on 17th June, found by a Clubtail Counter.

Later in the season, the conditions were more mixed but it was good to receive reports of **Emerald Damselflies** again from RSPB Otmoor, after two blank years. There was also the first VC23 record of **Small Red-eyed Damselfly** – from Blenheim Park on 6th August. As has often

been the case in recent years, the season continued into November, with the last record being of a **Common Darter** on 16th November.

It is good to be able to report that the move to iRecord has produced a surge in the number of records, with over 400 records of 22 species received this year for VC 23, compared with only 140 records of 20 species for 2016. Further details can be at <http://www.stephenburch.com/dragonflies/OxonDragons.htm>

Suffolk - VC25 & 26

Adrian Parr

It was something of a mixed year for dragonflies and dragonfly recording in Suffolk during 2017, though pleasing numbers of records were received via iRecord from new recorders in the county.

While many reports related primarily to moderate numbers of the usual species in the usual areas, there were nevertheless several important highlights. An immature male **Scarce Chaser** seen near Shottisham in mid June continued a recent run of unexpected sightings of this species, and fits the pattern of continuing range expansion within the county. A male **Scarce Emerald Damselfly** found in suitable breeding habitat in the north of the county near Norton on 6th July also provided good news – there are still only a

handful of sites for the species in Suffolk, all having been discovered within the last decade.

The other highlights for 2017 relate to migrant species. Significant numbers of **Red-veined Darter** were seen on the coast during late May and June, as part of a major national influx. Hollesley Marshes in particular produced counts well into double figures, and successful breeding is known to have taken place both at Minsmere and Landguard, with small numbers of teneral and/or immatures being noted at these sites during the autumn. The **Lesser Emperor** also appeared at a few coastal sites during the summer with records from Loompit Lake and Minsmere, and the latter site also turned up a female **Vagrant Emperor** during July.

On the downside, rather few reports of **White-legged Damselfly** were received during the season. The full significance of this is unclear, given the species' rather localised distribution within the county and the strong dependence of sightings on recording effort. It does, however, seem valuable for the Society to start monitoring this species as currently planned.

Norfolk - VC 27 & 28

Pam Taylor

Norfolk had a good dragonfly season in 2017, but nothing

The Common Clubtail found at Tadpole Bridge, Oxfordshire, on the 14th May 2017.



© Stephen Burch



Scarce Blue-tailed Damselflies were found at Roydon Common-Grimston Warren, Norfolk, in 2017.

exceptional was recorded.

That said, **Red-veined Darters** apparently bred at three sites with immatures seen at Winterton Dunes in May, at Kelling Water Meadows in August and at Beeston Common in September. The species was also reported from Queen's Hill near Norwich, Wolterton Hall Lake, Holt Lowes, Felbrigg Lake and Holkham Hall.

Keeled Skimmers were another species observed away from known Norfolk sites with singles observed on the Bayfield Estate near Holt in June, at Winterton in early July and at Scarning Fen later that month. At least two were present at Winterton in August. The maximum count at Roydon Common where the recent colony is rapidly expanding was forty-three in late June, with at least sixty-seven noted on the adjacent Grimston Warren in mid-July.

The Roydon Common and Grimston Warren complex is continuing to attract new species with both **Scarce Emerald** and **Scarce Blue-tailed Damselflies** being found last summer.

Although only a handful of each were seen, it demonstrates what sensitive habitat management work can achieve.

Another recent success story is the continued spread of the **Willow Emerald Damselfly** in

the county, with considerable infilling in East Norfolk and spread in West Norfolk, particularly along the north coast. Much of the credit for new finds must go to Derek Longe who searched diligently for the species throughout the year.

Finally **Lessor Emperors** appeared at the Trinity Broads of Ormesby, Filby and Rollesby for at least the fourth year in succession. The first sighting was at the beginning of June and the last just over a month later. Single males were also seen at Winterton Dunes, Holkham Hall and Selbrigg pond near Lower Bodham in late May and early June, with two seen at Whitlingham Broad near Norwich during the same period.

Cambridgeshire and Huntingdonshire – VC 29 & 31 *Val Perrin*

Despite the mixed bag of weather that 2017 presented we had some notable dragonfly records last year. On 13th May the Buckinghamshire recorder Alan Nelson was visiting Little Paxton and witnessed around 200 **Banded Demoiselles** making maiden flights along the River Ouse. On the evening of the following day local recorder Ian Dawson counted the first 10 **Norfolk Hawker** exuviae on the water soldier on the lake at Little Paxton which now holds this species. However, very early the following morning he counted over 80 exuviae by scanning the plants from the bank through binoculars. As this really only amounted to about a 10 metre scan out from the bank the real total must have been much

higher. Only 3 newly emerged dragonflies were seen, suggesting that most had emerged overnight and dispersed before dawn to avoid the bird predation which is a problem here. This was Ian's highest exuviae count here compared with the years 2013, 2015 and 2016 when counts were around 30. Following on from this Steve Cham saw over 200 Hawker-type exuviae on the water soldier through binoculars on 21st May. He collected 50 of the easily accessible ones and of these 42 proved to be Norfolk Hawker.

In June Toby Austin saw one **White-legged Damselfly** at Foxton near the sewage works, along with 6 other species. Iain Whitaker also discovered a small population of this species among Wild Carrot adjacent to a lake at Cambourne, the new supervillage near Cambridge. Although the flight period was over by the time I received the news I will check these sites out this coming year as this species is currently the likely subject of a BDS national survey due to incomplete information regarding its status.

Another surprise for our county was the sighting, backed by a photograph, of a female **Beautiful Demoiselle** at Wood Walton Fen on 19th June. This species is currently expanding its range, as Alan Nelson records that numbers 'exploded' in north Buckinghamshire last year and there were reports from other neighbouring counties for what is a species traditionally of southern and western Britain. However, the BDS atlas also shows recent gains along the eastern borders of this distribution map for the period

White-legged Damselfly had a poor season in Norfolk in 2017 but was found at a few sites Cambridgeshire.





The Norfolk Hawker appeared to have a good season in Cambridgeshire in 2017.

2000-2012, so possible interesting times lie ahead.

On the **Willow Emerald Damselfly** front, Andrew Maddocks saw 2 at Quy Lode on 1st August, from where we have recorded it before, but there were records of ones and twos from several new sites within Cambridgeshire last year and at least 8 at Cambourne.

Small Red-eyed Damselflies were plentiful at Quy Fen in 2017 and a **Lesser Emperor** was seen on a lake at the new Cambridge University West Cambridge development site in mid-June, coinciding with a number of other sightings around the country in the mini-heatwave at that time. Another was seen at Hemingford Meadow on 2nd July.

Bedfordshire - VC30

Rory Morrissey

Bedfordshire recorded an amazing 24 species this year, including two species confirmed "first ever" in the county.

The usual 21 resident species have clearly been augmented by the arrival last year and breeding success of **Willow Emerald Damselfly** at Duck End NR, where several pairs were seen ovipositing and where oviposition scars were found this year.

The first big news was the sighting of ovipositing **Variable Damselflies** at Felmersham, very much in the minority amongst many **Azure Damselflies**.

Variable Damselflies had been seen in recent years but only as wandering individuals, and only in the east of the county. Breeding success has yet to be confirmed but is hoped for in 2018.

Next a single male **Beautiful Demoiselle** was seen at Cranfield, picked up by the Buckinghamshire Dragonfly Recorder, Alan Nelson. This was almost certainly a wanderer from north Bucks, but it is the first confirmed recording of this species in VC30. (The 2008 records that were on the NBN database and included in the 2014 Dragonfly Atlas were mistakes.)

Then, in August, photographs were submitted that turned out to be **Keeled Skimmer** at Sundon Quarry, north of Luton.

This was in the same location where there used to be, over ten years ago, **Scarce Blue-tailed Damselflies**, now unfortunately extinct in the county. Eventually three or four males were seen at the site and are also presumed to be wanderers, although the habitat is perhaps suitable for breeding.

Observer effort was exceptionally high this year, although the

weather did not always seem to be kind. **Scarce Chaser** seemed to have a good year in the east and spreading further west, but **Downy Emerald** was very rarely seen in the south-west. **Hairy Dragonfly** seemed to have a good year while **Common Blue Damselfly** was most often recorded species. The season started with **Large Red Damselfly** in early April and finished with **Common Darter**, last sighted in mid-November.

Northamptonshire – VC 32

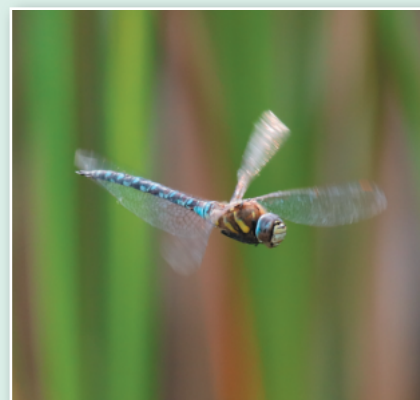
Mark Tyrrell

This year saw our highest recorded number of species in VC32, with a total of 25 achieved, along with the successful launch of the Northants Dragonflies Facebook group, marked it as one of the most memorable for a while.

I managed to record a new part of the River Nene and during mid-May encountered hundreds of emerging **Scarce Chasers** along a very accessible stretch early in the mornings. The highlight of my time with these chasers was counting over 1500 adults in a stretch of the river near Oundle, which I reported on in Dragonfly News 72.

Our field trip to Yardley Chase turned out to be one of the hottest days of the year, and before it was curtailed due to the heat, very high numbers of **Downy Emeralds** were recorded including egg-laying and mating.

A Migrant Hawker at Marston Vale Country Park, Bedfordshire, in 2017.



The first **Southern Hawkers** and **Emerald Damselflies** were also seen.

Despite their presence since 2004, I saw my first emerging **Small Red-eyed Damselflies**, marking the first absolute proof that they are breeding.

From the end of June onwards, my attention was diverted to the pond at Finedon where I found **Willow Emerald Damselflies** at the end of 2016. Despite near daily searches, my first confirmed sighting of the Willow Emeralds wasn't until 24th August. Before their season finished, mating and ovipositing were observed on a number of occasions, and a good number of scarred willow branches recorded.

The year ended with an immature **Red-veined Darter** recorded at Pitsford Reservoir. It isn't clear if this was locally bred but the timing coincided with emergence elsewhere in the country. No adults were reported earlier in the year, so this one stands alone.

Gloucestershire – VC 33 & 34 *Ingrid Twissell*

The other River Severn location The season began on 7th April when the first damselfly **Large Red Damselfly** was recorded at an area of wildlife ponds at Dundry Nurseries just outside Cheltenham, with sightings continuing throughout the month in various locations. The only other damselfly seen in April was **Azure Damselfly** recorded at Coombe Hill Canal on 22nd April. Two dragonfly species seen in April were **Downy Emerald** on 22nd April in the Cotswold Water Park, the first of the season, and **Broad-bodied Chaser** at two locations on the same date: a female at Frampton-on-Severn and a single at Woorgreens, Forest of Dean.

May saw 10 species recorded, with **Blue-tailed Damselfly**, **Beautiful** and **Banded Demoiselle** and **Red-eyed Damselfly** all spotted on 5th May at The Mythe, near Tewkesbury.

Dragonflies recorded were **Hairy Dragonfly** and **Four-spotted Chaser** at Western Approach, Severn Beach, on 18th May. There was only one further record for the year of Downy Emerald, which was on 22nd May at Woorgreens Lake. **Emperor Dragonfly** was recorded in Cinderford Linear Park, Forest of Dean, on 28th May. In the north of the county, at The Mythe, near Tewkesbury, 10 adults and 9 exuviae of **Scarce Chaser** were recorded on 14th May with two seen on 21st May, and two present at Twyning, River Avon, on 20th May.

Common Clubtail was present at The Mythe, when a single female was seen on 14th May, with one or two present on 21st May. Along the River Severn at Apperley six were present on the outward trip with three on the return walk on 21st May, and on 26th May a total of nine were seen including a maturing male, with three adults flying on 28th May. This seems to be the best location in the county at present. Further monitoring of locations along the River Severn were undertaken for the "Clubtail Count 2017" survey, but were unsuccessful. Common Clubtail was present on two occasions at Symond's Yat, River Wye, a single female photographed on 3rd June and a single male photographed on 28th June.

White-legged Damselfly was present in various locations: at The Mythe on 14th May when six were present, then monitoring took place from 30th May to 28th August when either single or presence was recorded, with three recorded on 22nd July, and six, including an immature, on 1st August. At Apperley, from the end of May to the end of July, up to seven were present. The best location was at a lowland-meadow with a brook running through the area, near to the M5 near Twyning, when a fairly high number of adults was present across the whole site.

Small Red-eyed Damselfly was seen at various locations in the county from June until August, with 200 seen at Western

Approach on 26th June, and the first recorded sighting in SP02 on 6th August near Andoversford, Cheltenham, when two were seen.

Ruddy Darter had a good year, with many more sightings than usual, **Red-veined Darter** was present on three occasions at Western Approach during June and July, with **Black Darter** recorded only from The Park, Tidenham, Forest of Dean, on 27th August. The highlight of the season took place on 31st August when a superb male **Southern Migrant Hawker** was seen at Western Approach, Severn Beach, by Mark Hallett, and accepted by Adrian Parr.

A personal highlight was when I was asked to appear on BBC "Springwatch", at Sherborne in June, to promote dragonflies, which was an interesting and enjoyable experience! The latest recorded sighting was of **Common Darter** at Woorgreens, on 8th November.

Worcestershire – VC 37 *Mike Averill*

The weather always dictates if and when adults are seen in the insect world and this year we had an extraordinary weather pattern

Good numbers of Downy Emerald were seen at Yardley Chase, Northamptonshire, in 2017.



resulting in very early emergences of dragonflies after some warm weather from February to April and a completion of the seasonal activity rather earlier than normal as temperatures dropped below average from mid July to September.

The early start to the year meant that many species peaked in the last week in May and not in June as would be expected. Some damselflies like the **Large Red Damselfly**, **Banded Demoiselle**, **Beautiful Demoiselle** and **Small Red-eyed Damselfly** all emerged earlier than in any of the last 11 years. The Banded Demoiselle particularly, appeared to be doing well and flew in the sort of large numbers that have not been seen since 2009. The Beautiful Demoiselle made good use of the fine weather and continued to expand in to the outskirts of Birmingham along the River Cole. The Small Red-eyed Damselfly consolidated its breeding area in the south of the county and was seen on the huge new lake south of the M50 motorway at Ripple and also in the north near Acocks Green, Birmingham.

The interest in blue coloured **Southern Hawkers** was rekindled when one was seen on the dragonfly walk in Monkwood in the summer. This is particularly interesting because the warden had noticed these aberrations several times in exactly the same place over the years. There is still no definitive explanation for the colour difference and a DNA project has been proposed for possible consideration by a

university department.

The **Scarce Chaser** continued to do well on the River Avon and surprisingly single individuals continue to be seen at Hilleditch Pool, posing the question how long can such a small population sustain itself so far from the main group at Pershore.

The impending publication of the Nature of the Malverns book prompted some survey work in the area and many new and old ponds were visited. Not perhaps thought of as being the best place to go to see dragonflies because of the preponderance of deep cold quarry pools, there have actually been 21 species recorded over the years with Castlemorton and Hollybed Common being local hotspots.

In all 24 species were recorded this year out of the county total of 29 with the rarest being the **Lesser Emperor**, seen at Fox Hollies, Acocks Green on the 4th August making it only the 5th time it has been seen since the first sighting in 2000. After a gap of two years a more regular visitor, the **Red-veined Darter** was seen at Pirton Pool on the 20th June. Attempts were made to find emerging adults in September but without success.

Once again Worcestershire has had a close look at how the **Common Clubtail** is doing, in line with other counties in the UK. In what might be considered the species' heartland, Worcestershire has had a reasonable year on the

Severn with the second highest emergence for 7 years and a similar state on the River Teme to last year. Worries about the lack of Clubtails on the River Avon were confirmed with no adults or signs of emergence being found anywhere along the river. This decline is puzzling as there is no apparent concern about river quality and 9 other dragonfly species are doing quite well on the Avon including the newly colonised Scarce Chaser. Although there appears to be a loss at the top of the River Teme, the upper reaches near Tenbury only ever had records during what was a short period of good years in the late 1990's. A close watch is needed however, in case the same withdrawal affecting the Avon is seen on the Teme as well.

Warwickshire – VC 38

Kay and Peter Reeve

The 2017 flight season started off with a remarkable early record of **Banded Demoiselle** photographed by Paul Casey on the river Tame at Ladywalk Nature Reserve on 4th April. Not only is this the earliest ever record for the species in Warwickshire by 16 days but proved to be the earliest for the UK in 2017. The Tame runs from the centre of Birmingham and has industrial sites along the banks which probably results in warming of the river and may explain the early emergence. It will be worth looking on the river in early April in 2018.

Large Red Damselfly and **Common Blue Damselfly** were seen at Bubbenhall Meadow on 11th and 22nd April respectively. Both were the earliest records for the county by one day. After that things slowed down and most other early species were either late or very late in appearing.

There were interesting appearances of **Red-veined Darter** at Marsh Lane Nature Reserve, Hampton in Arden. Several specimens were seen and one was photographed by Roy Ledbury on 31st May and the following day Dave Hutton saw three individuals

This Red-veined Darter was seen in Worcestershire in 2017, after an absence of 2 years.



and photographed one. All were mature specimens and probably part of the 2017 influx that occurred about that time. Now it becomes interesting. Later in the year on 17th and 19th August Jeff Rankin and Graham Rowling saw a male and a female on the respective dates. Both were pristine immature specimens. This strongly suggests that they emerged at the site and were progeny of the spring influx. Jeff Rankin wrote a full report on the occurrence of Red-veined Darter at Marsh Lane in 2017 which can be found on the Warwickshire Dragonflies website, link: <https://tinyurl.com/ybopr6j7>.



© Jeff Rankin

Immature Red-veined Darters in Warwickshire suggested successful breeding here for the species in 2017.

In Warwickshire we have established a simple monitoring protocol based on the BDS protocol. There were efforts to recruit monitors in 2016 and 2017. Five were recruited in 2016 and a further seven in 2017. All the 2016 recruits continued monitoring. In 2017 they monitored 12 sites at least three times and a total 28 were monitored at least once. We hope to recruit more monitors at the 2018 Adult ID and Monitoring Workshop.

It is sad to report that no **Scarce Blue-tailed Damselflies** or **Clubtail Dragonflies** were recorded in 2017. The Blue-tail site has been "restored" to agricultural use one stage too far and the last breeding pool destroyed.

Staffordshire – VC 39

Dave Jackson

It's been a good year for interesting records in Staffordshire. I was pleased to record an out of range **Keeled Skimmer** at Baggeridge Country Park near Wolverhampton, together with a small colony of **Emerald Damselflies** both first records at this location. Gailey Reservoir was graced by a **Lesser Emperor** and a colony of **Red-eyed Damselflies**. Belvide Reservoir hosted up to three **Red-veined Darters** and a superb male **Lesser Emperor**.

Black Darters performed well

at Womere on Cannock Chase towards the end of August. During the summer I was delighted to hear that **Banded Demoiselles** had colonised Wom brook in Wombourne and a colony of **Keeled Skimmers** (photographic evidence provided and verified) had been in residence at a sensitive mid-County site, where the Skimmers had initially been discovered several years ago.

Shropshire – VC 40

Sue McLamb

A promising start to the year with the earliest ever Shropshire flight season. **Large Red Damselfly** was the first species on the wing on April 8th, seen in Langleyfields, Telford. This was followed by the earliest ever **Four-spotted Chaser** seen at Whixall Moss on 22nd April. The summer of 2017 saw a total of 26 species recorded comprising 16 dragonfly and 10 damselfly species. Typically 27 species are recorded in Shropshire each year, the missing regular in 2017 being the **Scarce Blue-tailed Damselfly**.

Beautiful Demoiselle produced some interesting records at still water sites and was recorded in a new county hectad. **Black-tailed Skimmer**, **White-legged Damselfly** and **Red-eyed Damselfly** were also

recorded in new county hectads, the latter having a particularly abundant year with recorders reporting unusually high numbers of this species. We also had the 2nd recorded sighting of **Red-eyed Damselfly** at Venus Pool (1st in 2007)—a fairly frequently recorded site. As for **Small Red-eyed Damselfly** this elusive species sadly remains unrecorded in Shropshire.

Shropshire again benefitted from the Clubtail Count thanks to organisers Dave Tompkins and Genevieve Dalley. Not only were the first confirmed breeding records of **Common Clubtail** found on the River Vyrnwy (right on our borders!) but numerous other exuvial records were made of species such as **White-legged Damselfly** and **Banded Demoiselle**.

The Shropshire Dragonflies Website kept recorders in touch with the comings and goings of 2017 via the flight season blog..... definitely worth a look from April onwards! Full details of our 2017 flight season can also be found in the latest newsletter now on the website. <http://shropshiredragonflies.co.uk>

Finally just a quick chance to say a huge THANK YOU to all who have sent in records over the last 8 years. In 2018 I'm handing

the CDR baton on to Vicky Nall who I know will be just as keen to receive all your records. I'll still be running the website and blog and I have no doubt I'll see some of you out and about viewing our great Shropshire dragonflies!

Breconshire - VC 42

Keith Noble

Two species were added to the Breconshire list in late May 2017. Dick Eastwood, as well as finding a number of **Common Clubtails** on the Radnorshire side of the Wye, crossed the river and found two exuviae at the Warren, Hay-on-Wye. At Llangorse Lake I found an immature male **Red-eyed Damselfly** among hundreds of blue damselflies in my favourite rough, damp, lightly-grazed field. Remembering that Mike Tompkinson had mentioned seeing this species at Sarnau, I asked him to look back at his notes and he reported mating and ovipositing at two pools in June 2011, and ovipositing again that August, but no sightings since.

Hairy Dragonfly has appeared in small numbers at Llangorse Lake each early summer since its rediscovery in 2014. On 2nd May Dick Eastwood proved breeding for the first time when he watched and photographed an

emerging male. On the same day Mike Tompkinson saw **Large Red Damselfly** at Sarnau pools and by 24th July with **Brown Hawker** he had noted first appearances of thirteen species there. On Mynydd Illtyd, I enjoyed a rewarding 25th July with sightings of thirteen species including **Scarce Blue-tailed Damselflies** and more than a hundred **Black** and **Common Darters**. Dozens of **Migrant Hawkers** and a few **Southern Hawkers** were prey for Hobbies at Llangorse in September.

Mark Waldron took a long walk in the Beacons from the Storey Arms on 21st June and found a good total of fourteen **Golden-ringed Dragonflies** as well as a **Keeled Skimmer** and **Broad-bodied** and **Four-spotted Chasers**. He also visited the Tarrell valley and other sites west of Brecon, making one of the later sightings of the year at a pool on top of Cefn Llechid where three **Common Hawkers** were ovipositing on 8th October. The last Migrant Hawkers at Llangorse were noted on 25th October.

Radnorshire - VC 43

Bob Dennison

The 2017 Radnorshire dragonfly recording effort resulted in 377 records from 19 contributors,

including some new recorders and the handful of volunteers who surveyed allocated sections of the Wye for the Common Clubtail Survey. Our flight season began at a bog-meadow pond near Hay-on-Wye on 9th April with the emergence of a **Large Red Damselfly** and finished at the same location on 17th October with the last remaining **Common Darter**.

With the exception of **Scarce Blue-tailed Damselfly** which has not been recorded for two consecutive years, the season featured all of Radnorshire's regularly recorded species, comprising 14 dragonfly and 8 damselfly species. No new species to the Vice County were recorded.

The increased recording of **Common Clubtail** led to a slight increase in records of both species of Demoiselle and **White-legged Damselfly**. However, in mid-Wales, concerns remain over the health of our watercourses - particularly in the context of diffuse agricultural pollution, increased numbers of intensive poultry units and widespread concerns over ineffective regulation. In that context, continuation of the Common Clubtail survey - and the idea of carrying out a similar study on White-legged Damselfly - would be most welcome.

A Hairy Dragonfly photographed in Breconshire, 2017.



On a lighter note, and on behalf of the Radnorshire Odonata recording community, I'd like to thank Adrian Parr and Dave Smallshire for giving us the benefit of their expertise. Kate Goslett photographed numerous dragonfly wings, left in piles at the edge of her garden pond. It was apparent that the victims were hawk dragonflies - but I needed the forensic skills of Adrian Parr to help identify the species of the unfortunate dragonflies as **Southern Hawkers**.

In late May, Dick Eastwood photographed what initially appeared to be immature and very early Common Darters. The photographic detail allowed

our two BDS super-sleuths to examine the numbers and yellowness of the antenodal cross-veins, thereby clinching the species identification as **Keeled Skimmer**. Historically, the west of Radnorshire has been the main stronghold for Keeled Skimmer, so Dave's and Adrian's input was particularly helpful in building species-evidence for the south and east of the county.

Lincolnshire – VC 53 & 54

Nick Tribe

On 17th June Dave Mainwaring found and photographed the second **Norfolk Hawker** for Lincolnshire at Deeping Lakes Lincolnshire Wildlife Trust (LWT) reserve, near Deeping St. James in south Lincolnshire. The hawker was found in a sanctuary area of the reserve and could not be refound later. The first record for the county (also photographed) was at Messingham Sand Quarry LWT reserve on 29th August 1997. The period between June 17th and 21st 2017 was very warm with southerly winds, so it is tempting to speculate that this animal was from the Paxton Pits population. **Lesser Emperors** were seen at RSPB Frampton Marsh on the Wash on 26th May by Ed Mackrill and on the 17th (Toby Collett) and 19th of June (Anon.). Another was seen at Alkborough Flats on the Humber Estuary on the 18th June by Clare Gillatt. Perhaps the first animal emerged locally.

Scarce Chaser was recorded again in Lincolnshire. Trisha Thompson noticed a photograph of a female taken at Arnolds Meadow LWT reserve in Spalding on 31st May. This is 13km north of where they were seen on the New South Eau on the Lincolnshire/Cambridgeshire border in 2016. They were seen again at the latter site in 2017.

Red veined darters were recorded at RSPB Frampton Marsh between the 9th and 19th of June with a maximum of 5 seen on the 17th. Five were also seen at Hutoft Pit LWT reserve on the coast on 13th June (John Walker).

Willow Emerald Damselflies

were seen again at Baston Fen and Gibraltar Point NNR (both LWT reserves). They were not recorded elsewhere in Lincolnshire despite some searching for them.

Leicestershire & Rutland – VC 55

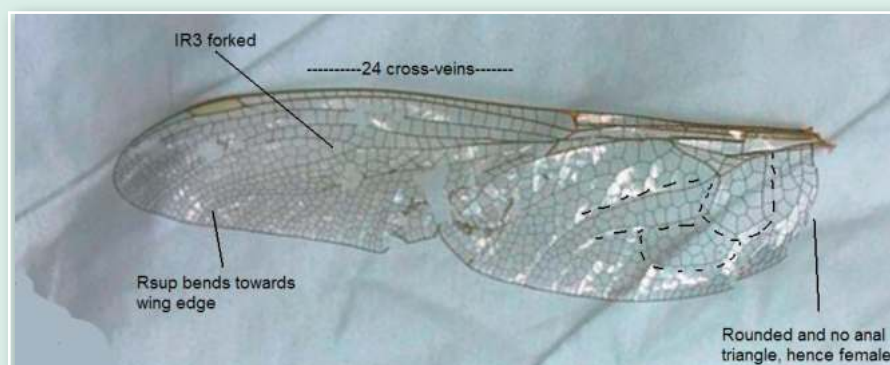
Ian Merrill

Those who read my 2016 summary may recall that it concentrated on the unprecedented developments in the recorded distribution of the Scarce Chaser in VC55. Following on from 2014 records on the River Welland in southernmost VC55, a total blank in 2015, and then records on the River Soar on northernmost VC55 in 2016, what would 2017 bring for the **Scarce Chaser**? Well, in 2017 there were no records on the River Soar, in spite of some concerted efforts to find them. The good news, however, was of a single male recorded on the River Welland, on 18th June, again close to Tinwell. Although just a single record, this almost certainly verifies that there is now a resident population of this magnificent dragonfly present on the River Welland.

Once again, I would urge recorders in VC55 and also neighbouring areas of Northamptonshire, Nottinghamshire and Derbyshire to search suitable habitats in the vicinity of the 2016/7 records and hopefully help to paint a clearer picture, with regard to the mysterious distribution of the Scarce Chaser in the region.

The other cause for excitement

The mystery wing of a Keeled Skimmer, found in Radnorshire, 2017.



in VC55 was an upsurge in the number of **Beautiful Demoiselles** recorded, with at least five individuals seen along the rivers Avon and Welland, close to the Northamptonshire border, during the month of June. This appears to add weight to the belief that this species also has a resident population in VC55, and I would also urge any budding recorders to concentrate their efforts in a quest to accurately plot the distribution of this scarce species in VC55. Happy recording!

Lancaster – VC 59 & 60

Steve White

It was a year of mixed fortunes, with one new species for the 'county', first confirmation of breeding for another, some range expansions and contractions, and low numbers for some common species.

A female **Vagrant Emperor** appeared in a garden in Gorton, Manchester on 18th October, only our second recent record of a rare migrant following a female **Southern Migrant Hawker** in the Sefton Coast dunes in 2015.

Keeled Skimmer first occurred at Grindleton Ponds in east Lancashire site in 2013 but has not been seen there subsequently; while 2015 produced a wandering insect on the Sefton Coast and two at Birk Bank Bog on the edge of the Forest of Bowland, where breeding was confirmed this year with up to seven seen. There is no lack of suitable habitat in Lancashire so a further range expansion seems likely.

Red-eyed Damselflies had been confined for very many years to two ponds in St. Helens and one in Hale, south of Liverpool but in 2016 small numbers were found on another pond in Speke close to the latter site, and on the Leeds-Liverpool Canal in Aintree. This year saw a marked expansion of the Aintree population and the discovery of another 20 miles away on the canal in Wigan although, despite searching of areas with water-lilies, none has yet been discovered in between. As in other regions, the **Banded Demoiselle** has enjoyed a more than exponential spread; having been confined to two sites south of Preston until the late 1990s it is now found throughout and has become the 'county's' twelfth most numerous species.

Red-veined Darters have been recorded almost annually throughout the twenty-first century, at most sites as obvious migrants, but a small population appears to have become established in north Lancashire at an ex-industrial site at Middleton, Heysham, where up to four were seen in 2017 from late May to mid-June. There is some uncertainty as to whether this is a permanent breeding population but their close to annual appearance there is strongly suggestive; records at no other site are anywhere near as regular.

Going the other way as a breeding species, the **Ruddy Darter** was reported from just



© Ian Merritt

Male Beautiful Demoiselle, River Avon, Leicestershire, June 2016, which represents the first image of this species to be taken in VC55.

four areas this year with definite breeding occurring only on various dune slacks on the Sefton Coast, the previously regular population at Middleton having apparently been lost.

Our poorest recorded species continues to be the **Golden-ringed Dragonflies** with reports from a mere half a dozen areas this year. However, it is entirely restricted to the upland fells and fringes of the Forest of Bowland, much of which is inaccessible and is known to be significantly under-recorded. On the other hand, our two other upland specialists, **Common Hawker** and **Black Darter** are far more widely distributed throughout the south and west Pennines as well as Bowland, where records

indicate both had a typical year. Both species are always more numerous on lowland raised bogs – in part due to extensive restoration work carried by the Lancashire Wildlife Trust – than upland blanket bogs but no records were received this year from the key lowland sites in Wigan, Bolton and Salford.

Several common and widespread species appear to have had a rather poor year, probably caused by poor weather during their flight periods. This was particularly notable for **Common Darter** for which site day-counts in excess of 100 are usually far from infrequent and those over 50 quite common. This year, however, double-figures were reported from only four sites and the largest count was just 25.

A small population of Red-veined Darters appear to have established in Lancaster.



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South-east Yorkshire – VC61 Martin Roberts

2017 was a quiet year for Odonata in SE Yorkshire, with fewer records submitted than in recent years. Arguably the most interesting sighting of the year for Odonata-spotters in the vice-county occurred near Goole, which is just over the border into SW Yorkshire, where significant numbers of Red-veined darter were seen in September. This species is frequently recorded in SE Yorkshire at Spurn, some 40 miles to the East, and occasionally

near Filey, but usually in low numbers at both sites.

An anecdotal report of **Hairy Dragonfly** on the upper reaches of Pocklington Canal in May was keenly investigated. If confirmed this would have been a new locality for this species but in spite of repeated visits, and the obviously suitable habitat at this site, it was not possible to confirm the sighting.

In 2018, the Yorkshire Wildlife Trust is beginning a project to restore a number of dew ponds on the Yorkshire Wolds. Due to the geology of the Wolds there are very few permanent water bodies in that area, so consequently there are few records of Odonata. Several BDS members are looking forward to helping with the survey work.

North-east Yorkshire and North-west Yorkshire – VC 62 & 65

Keith Gittens

The season started early with a first record of **Large Red Damselfly** on Strensall Common on the 9th April.

Red-eyed Damselfly continues to thrive at Gilling Lakes near Ampleforth although much of the floating vegetation was cut and removed part way through the summer. The floating vegetation quickly re-grew and adult Red-eyes continued to be found although the larval population may have been impacted. Small Red-eyed Damselfly continues to be recorded although numbers at Strensall Common were very low. In line with other parts of the country it was a good year for migrants with **Red-veined Darter** recorded at two sites - The Tarn, near Goathland on the 12th June and Seamer Tip Pools, near Scarborough on the 18th June and 3rd October. Then on the 9th July there was a **Vagrant Emperor** photographed at Scaling Dam towards the northern edge of the North York Moors.

The number of records for these two vice-counties have been limited in 2017 and have been only from about 25% of the recording area. In view of the latest recording initiative for the atlas update in 2020 a plea goes out for as many records as possible in 2018! Many thanks to those sending in records.

Mid-west Yorkshire – VC 64

Simon Joseph

Mid-west Yorkshire extends from York and Goole in the East to the Forest of Bowland and the West Riding in the West. I took over in the summer, and would like to thank Tom Hubble for previous years, and teaching me about the key sites. Thanks also to the members of the Lancashire and Yorkshire Dragonfly Groups, particularly Keith Gittens, Martin Roberts and Chris Abbott, and more than 50 people who have submitted records.

The Freshwater Habitats Trust supplied kits to test the water quality of 15 sites in VC64 and neighbouring Lancashire. Sites tested included Timble Ings, Malham Tarn, Gisburn Forest and Grindleton Fell. We were pleased to report that 14 were free from nitrates and phosphates. The contaminated site is an abandoned canal cut in Barnoldswick subject to farm run off.

Tom organised guided walks at Timble Ings and Grindleton Fell. We also helped on the BDS stand, with other Yorkshire recorders, at York Insect Festival.

Extensive visits were carried to confirm species at 16 sites, all of which were confirmed except **Golden-ringed Dragonflies** at one site. They are possibly lost from Grindleton Fell due to tree loss from forestry and overgrowth of streams (15 visits without sightings).

Chris Abbott contacted landowners around Sherburn in Elmet and surveyed various private. He filled in gaps in the record, including expanding the

known range of **Small Red-eyed Damselflies**.

The bird watchers at St Aidans RSPB submitted over 250 dragonfly records, including **Red-veined Darters**. Particular thanks to Peter Haigh.

Alice Crosby at Nidderdale AONB has contacted about the upcoming Wild Watch project. This exciting project aims to fill gaps for key species including Golden-ringed Dragonflies and **Black Darters**, which should be present but have not been recorded.

Westmorland and Cumberland - VC 69 & 70

David Clarke

Yet another year of mixed fortunes, with only limited periods of good settled weather – the best of which was in early June. This brought the only obvious instance of migratory movement: a mature male **Red-veined Darter** was noted and photographed at a site on the Solway Firth (NY26) on 9th June. This coincided with the much wider immigration into the UK at that time. Records generally were far fewer than average.

Signs of expansion of the **Banded Demoiselle** in the north of the county, mainly in v.c. 70, continued to be found. Records on the River Derwent extended to the section of the river just south of Keswick (NY22), where it enters Bassenthwaite Lake. Other

Brilliant Emerald breeding records were made at Loch Bran in 2016



records were on the upper reaches of the River Petteril, near Penrith (N33). The species also appeared to be exploring the River Eamont (presumably via the River Eden) and individuals were noted at the head of the river, where it flows out of Ullswater (NY42). In most instances, these records refer to quite short lengths of vegetated watersides amongst stretches of relatively fast flow, or where banks were shaded or not otherwise suitable. A **Beautiful Demoiselle** male near Brampton (NY55) on 1st June echoed a 2015 sighting in the same general area, though as yet there is no evidence of the species' presence hereabouts. In view of reports of its range changes elsewhere in the UK, and the more obvious tendencies of its sister species, this will be something to watch for in future years. The news on the financial problems of the Moorside Power Station Development in West Cumbria (NY00) has provided a temporary lull in the potential threat to the future of the only county site for the **Variable Damselfly**. This small colony must however remain vulnerable.

Downy Emeralds were noted mating at Yew Tree Tarn (NY30) Coniston on 25th June, and well-photographed by the observer.

Emperor Dragonfly sightings were fewer than usual, but an interesting record that has just

come to light from West Cumbria, where larval remains have been found in Otter spraints – an unusual and possibly unique source of records for this species!

Migrant Hawkers were present in some numbers at Arnside Knott (SD47) in September: here they are close to regular breeding sites in north Lancashire. Once again, the Siddick Ponds area near workington (NY03) produced sightings, suggesting there is a breeding colony there. A mature male **Broad-bodied Chaser** was present at a fairly bare-margined small lake at Melkinthorpe in the Eden valley in early June (NY52) in the Eden valley; given the weather at time, it is perhaps surprising that there were no other relatively northerly sightings. The species appears to be making only slow headway from its southern bases in the county. This situation seems much the same with **Black-tailed Skimmer**. An almost mature male near Kendal (SD59) on 19th June was well inland, but the species still shows only scant signs of colonisation, even coastal sites. **Keeled Skimmers** reported last year at 270m in Swindale (NY51) were found freshly emerged there on 17th June, further confirmation that the valley-head mire in this attractive and remote area can support the species. **White-faced Darters** at the Foulshaw Moss re-introduction site did not match



©Adam Moan

A Common Hawker in Cumbria, 2017.

the 2016 emergence numbers, though reduced counting effort meant some exuviae were missed. The 2018 count should be more comprehensive and is awaited with much interest. (Emergence starts very early in May, at least two weeks before that at the donor site near Carlisle.) The hoped-for site on Claife Heights, Windermere (SD39) mentioned last year proved not to have the potential we had hoped for, and indeed there have been no reports for this species from Claife now for two years running.

A White-faced Darter larva. The species was less numerous on Foulshaw Moss in 2017 compared to 2018.



© Christophe Brochard



Scottish Updates



Highlights from Scotland

Pat Batty, Scotland Dragonfly Recorder

The weather in Scotland in 2017 was poor with many days of wet and windy weather particularly on the west. There were relatively few periods of settled warm sunny weather. Despite this there has been some interesting sightings and records from areas that have been poorly covered in the past. The Scottish recorders have also been looking at priority species and sites. The aim being to update records and to get breeding information where possible.

There have been fewer records for **Azure Hawker** this year, larvae and adults proved to be illusive at Grudie in May. The first sighting was on 8th June at Dundreggan, followed by an adult at Slattadale on the 10th June. Most sightings in the N.W. Scotland; Torridon and Wester Ross. An adult male was rescued from Loch Broom, after wet weather, in July. Adults were also seen in Glen Affric, Glen Cannich, Glen Lyon, Glen Loy and west of Inverness. A female was photographed at a new site east of Loch Ness outside Scottish Power Office. A handful of larvae were in bog pools in Glen Affric and on Rannoch Moor near Corrour, however they were far outnumbered by Common Hawker. The Silver Flowes site in SW Scotland was visited. No larvae were found but the pools were in poor condition at the time of the visit. The first emergence recorded for the **White-faced Darter** was on 8th May at the Moss of Achnacree, near Oban, this is earlier than previously recorded. The main emergence was from 21st to 24th May in Wester Ross and Strathpeffer. New breeding sites in new hectads were again found east of Loch Ness at Lochan a Blair and at Wood of Achnatone, south of Nairn in Moray. In Scotland we don't know the full distribution of this species new sites have been found in recent years.

The **Northern Emerald** was seen in West Ross and also Abernethy, with sightings from early June through to August. A female was spotted at Insh Marshes, a pair on the Isle of Raasay, off Skye, an adult above Pitlochry near Logierait Mires and another in the main coire on Ben Lawers, the last two in new hectads. Larvae were found at Flander's Moss near Stirling. New breeding sites were found in Glen Affric, Glen Cannich and Strathglas, thanks to the efforts of Brian Hall. In 2017 Larry Templeton spent many days surveying for **Brilliant Emerald** and updating records. He found the species at 25 lochs in Easternness in the Loch Ness, Glen Affric/north areas. Exuviae were found at six lochs. He identified 11 new sites on the high ground above



© Christophe Brochard

The Azure Hawker had a less successful year in 2017, with fewer sightings in Scotland.

Corrimony and above Loch Ness (both sides) and also in lochans both north and south of Drumnadroichit. The northern range now extends to just north of the river Beaully. This species was only known from a handful of lochs in the Affric and Loch Bran areas before 2000. Most sites were at over 300 metres in altitude, up to 400 metres. During his survey he had some epic days visiting remote sites in rough terrain. There is so much more to be discovered in Scotland. The slightly lower sites also had **Downy Emerald**. New breeding evidence was found for several sites in Glen Affric and around Loch Bran, where the species was only recently found. It too was found in a new hectad above Drumnadroichit. The earliest exuviae were seen on 7th June slightly later than last year.

The **Keeled Skimmer** was seen in new hectads on the Isle of Shuna, off Ardnamurchan and at new site in Kintyre. In Dumfries and Galloway the **Hairy Dragonfly** has been confirmed breeding at an additional site in south-west Scotland. There have been sightings of the **Southern Hawker** throughout Scotland, apart from the far north, and colonisation. The **Emperor Dragonfly** was not seen at previously recorded sites again this year, the species seems to have stopped its northwards advance. The **Red-veined Darter** may be now breeding in Scotland. It was first seen at Newmains farm on 19th May, an early date for migrants. It was seen ovipositing at Millar's Moss on 17th June. Egg laying was also observed here in 2015. It was also recorded from much further north on Copinsay in Orkney on 20th June. The **Migrant Hawker** is breeding in Dumfries and Galloway at Clovend lochs and 18 individuals were observed on 3rd September, adults were also observed in Ayrshire on 9th September. The **Broad-bodied Chaser** was seen in East Lothian on 31st May and in the Borders on 2nd June. The **Lesser Emperor** was seen at the bird observatory on North Ronaldsay on Orkney on 15th June. In Dumfries and Galloway the **Hairy Dragonfly** as been confirmed



breeding at an additional site in West Scotland.

Management advice has been given to landowners of **Northern Damselfly** sites but we are still learning about this species. At Logierait in Perthshire one of the known sites has now no open water, and Northern Damselfly has not been found here for the past two years. New lochans were dug to help alleviate the problem and thankfully larvae and adults were seen one of these. at the nearby newly created lochan. The new loch at Castle Fraser in Aberdeenshire now has as a bigger population of Northern Damselfly than the original site. Juliette Dinning has found further new sites on Deeside and has proved breeding in pools on Tarland Golf course. This site provides links between upper Deeside site and Castle Fraser near Aberdeen. Breeding has also been confirmed at Wood of Achnatone south of Nairn proving this to be a viable site. In contrast to last year, the poor weather during the main flight time of the **Beautiful Demoiselle** meant there were few sightings. However the species was recorded from the River Earn at Comrie, further east than any previous records. I am not sure if this represents range expansion or just that no one has looked here before. It will be interesting to look at the site in 2018. The **Banded Demoiselle** appears to be moving north with individual males seen in areas just south of Edinburgh and on the Union canal. A male was also at Mire Loch near St Abbs. First recorded this year on 16th July in the Dalbeattie area. It was seen on new stretches of the River Whiteadder. Barbara and Richard Mearns and Bob Merritt surveyed **Variable Damselfly** sites in south-west Scotland. It was present at 13 sites here. A completely new site in a new county was discovered in Roxburghshire.

The Forestry Commission in Scotland has many important dragonfly sites on their land and they have recognised these as priority sites. Discussions continue over management and training of their conservation staff. We are indebted to the interest shown to enable this. As well as the highlighted species there has been much general recording throughout Scotland. There have been over 3000 records submitted from a large range of sites by over 250 people, with over 1000 days of recording. I give thanks to all and to the efforts of the Scottish group. I am also grateful for records from the UK Butterfly Monitoring transects as these are from under recorded areas and include several visits to a site.

White-faced Darter at the Moss of Achnacree, new BDS Priority Site.



© Pat Batty

BDS Priority Site: The Moss of Achnacree

Pat Batty, Scotland Dragonfly Recorder

The Moss of Achnacree, near Oban, is on the north side of Loch Etive and is one of our newest priority sites in Scotland.

The outwash plain here is covered by two metres of peat. The moss is 1.5 km. by 1.5 km and has three large lochans and some smaller pools. The lochans are in kettle holes formed when large blocks of ice left behind by melting glaciers, were surrounded by glacial material. The hole left behind when the blocks gradually melted then filled with water. The site has been cut for peat by the local community for generations. The peat was also used the population of the nearby limestone Island of Lismore and by the Oban distillery. Peat cutting has created a number of small sphagnum filled pools with interesting dragonflies. The landowner Max Bonniwell is very happy to manage the site for dragonflies.

White-faced Darter was first seen here by Neville Crowther in 2013. Further investigations of the area have found six White-faced Darter breeding pools. The main area of interest is on the north of the moss just south of the road which connects North Ledaig with Loch Etive. Near the road is a large pool at the edge of a natural wooded strip. The pool is deep, surrounded by rushes, with extensive areas of sphagnum. Over twenty larvae, 15 exuviae and 6 adults were found here in 2017. The water was over 50cm deep at the edge and areas are difficult to access so more larvae are likely to be present. To the west of this pool are some small bog pools, which become dry in periods of drought, however on 12th September 2017 34 White-faced Darter larvae were found in 5 minutes. Further east are two pools which are gradually infilling with sphagnum. The first had little open water, the second was more open, with White-faced Darter larvae, exuviae and adults. Work to create an access track 20 years ago caused a further small pool to be formed, which White-faced Darter have also colonised. None were found in a second, shallower pool, with less sphagnum, by the track. Surprisingly a larva was found in a shallow, flooded, permanent pool in a nearby field with no sphagnum. A deep kettle hole in the centre of the moss with abundant sphagnum also held White-faced darter larvae. The large lochs had no larvae in September but the water was cool.

Four-spotted Chaser, Common Hawker and Large Red Damselfly larvae are also common. Emerald damselfly larvae were seen in June. Common Blue Damselflies and Common and Black Darters are also present.



National Dragonfly Week 2017: an Orcadian perspective

Graeme Walker

In Orkney, there was a change of emphasis for this year's Dragonfly Week. Normally, a couple of walks would concentrate upon the island of Hoy and an accessible site in West Mainland. This routine is all well and good, it concentrates upon places that have abundant Odonata (for Orkney) and consequently it has a fairly high success rate of finding dragons and damselflies with which to enthuse attendees. However, by its very nature, it is a bit geographically biased towards the west side of the archipelago, so a plan was hatched to take the Week on a wider tour.

Partnering with the Orkney Field Club, Island Rangers and local RSPB wardens, an itinerary was drawn up to take in eight islands in eight days, which would give the opportunity to bring dragonflies and damselflies to the attention of a broader swathe of the population. Not to mention, recce-ing many sites previously unknown to the county recorder.

On the Sunday before Dragonfly Week, a practice run was carried out on the island of Graemsay (population 25), to check out a quarry pool where Blue-tailed Damselflies had been seen in 2016. The weather was reasonably kind and the emergence of 11 individuals was recorded.

At the beginning of the Week, the 15th July saw the local biological records centre holding an Open Day in Kirkwall, showcasing the work of the department and offering to ID wildlife from photos brought in by the public. My decision to attend had been made months previously, resulting in a double-

A recently-emerged Black Darter with its exuvia in Hoy.



© Graeme Walker



© Graeme Walker

Everything but the odes - a pool in Egilsay with seemingly all the correct habitat ingredients

booking, but as the weather on the day was dreich and decidedly odo-unfriendly, it turned into a useful opportunity to promote the recording of Odonata sightings and Dragonfly Week.

For the 16th, the island of Sanday (population 550) was the destination. Half a dozen attendees helped to survey six sites and 70 Blue-tailed Damselflies were recorded across the island, with breeding proven at the western end of the island.

On the 17th, for the day on Shapinsay (population 307), a poor forecast resulted in the start time being pushed back into the afternoon in the hope of drier weather. This was partially successful, but it was still cloudy, windy and cold. Four hardy souls were treated to an indoor talk, before they helped to look around the many pools and ditches on the island. Only 3 Blue-tailed Damselflies and a single Large Red Damselfly were seen, but Shapinsay will be worth another visit on a sunnier day.

The 18th couldn't have been more different, with wall-to-wall sunshine and gentle breezes. Heading to Papa Westray (population 90), in a small twin-engined aircraft, only added to the excitement and sense of anticipation. However, despite the valiant efforts of 3 islanders and loads of reasonable habitat, in a day of searching we found not a single ode.

By the following day, tension was beginning to build. Would Eday (population 130) be able to deliver some good news? In reasonable conditions (for Orkney!), there was a degree of hope, as a Black Darter had been recorded on the island for the first





© David Kitching

A female Common Hawker Ovipositing (egg-laying). This species was found on several days of the Orcadian trip.

time in 2016. Happily, four attendees and five sites later, it was duly confirmed, Black Darters and Blue-tailed Damselflies were breeding in Eday.

The 20th brought a return to persistently wet and windy weather for a trip to Egilsay (population 26). Whilst several suitable pools were identified, no Odonata were seen, and the four attendees were allowed to drip dry whilst listening to an indoor presentation.

In another about turn, the weather for the 21st was glorious, and a happy band of five attendees pottered around Rousay (population 216) in warm sunshine. Six sites were surveyed, and as well as finding the expected Common Blue Damselflies, a few Blue-tailed Damselflies were also seen, a new species for the island. Late in the afternoon, on the way back to the pier to catch the ferry, a previously unsurveyed field pond was noticed. Enquiries at the nearest abode resulted in permission to recce the water body and, to everyone's delight, a thriving colony of Blue-tails in all states of breeding activity was discovered.

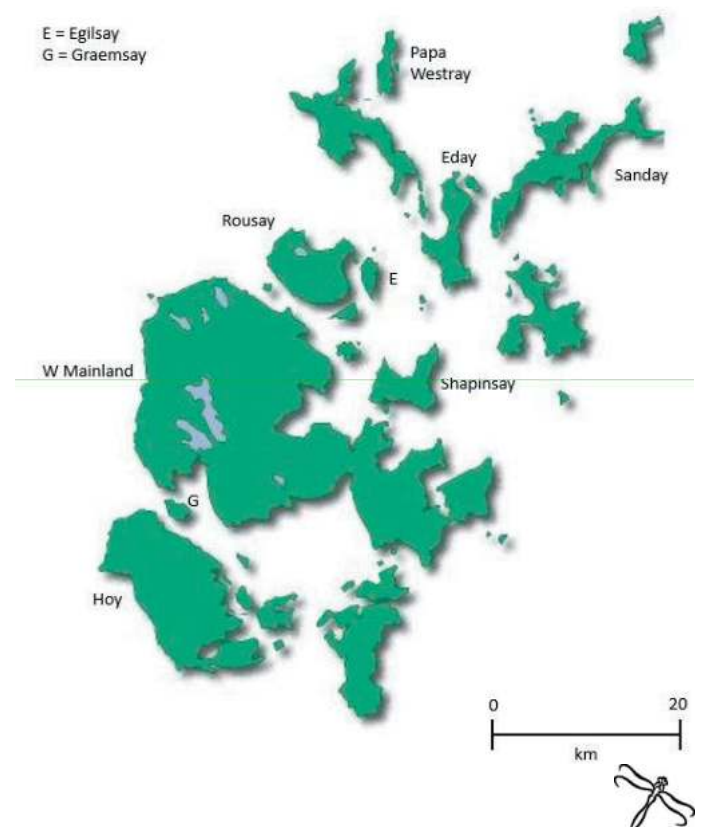
The penultimate day of National Dragonfly Week saw a journey to Hoy (population 272) to look in the Wee Fea area. It's fair to say that when individual species counts amount to greater than the number of fingers and toes in the group, then it's a good day. Six species were seen, with Black Darter dragonflies, Common Blue and Emerald Damselflies being recorded as 'Abundant', whilst there were also Large Red and Blue-tailed Damselflies and a few Common Hawker dragonflies. Several stages of emergence, maiden flights, courtship, mating and egg-laying were all witnessed, which is pretty much all you could hope to see of the life of the adult insect.

And so, sadly, we came to the 9th and final (and somewhat increasingly inaccurate) day of National

Dragonfly Week. No boats, no planes, just a gentle drive to Russadale in West Mainland, to explore the pools at an old quarry. In reasonable conditions, four attendees had to work hard to find a few Large Reds and Blue-tails, but were eventually rewarded with great views of an ovipositing Common Hawker, which was a good site record.

My thanks to all who helped with transport, encouragement, keen eyes, hospitality and enthusiasm from all over the Orkney archipelago. And a special mention must be made for the invaluable assistance given by the visiting Buckinghamshire recorder, Alan Nelson.

The Orkney Isles, the subject of this Dragonfly Week Expedition.



Checklist of British Species

Table 1. Category A: resident and/or migrant species recorded since 1970

Damselflies		Dragonflies	
Common Name	Scientific Name	Common Name	Scientific Name
Demoiselles (Calopterygidae)		Hawkers (Aeshnidae)	
Banded Demoiselle	<i>Calopteryx splendens</i>	Azure Hawker	<i>Aeshna caerulea</i>
Beautiful Demoiselle	<i>Calopteryx virgo</i>	Southern Hawker	<i>Aeshna cyanea</i>
Emerald Damselflies (Lestes)		Brown Hawker	<i>Aeshna grandis</i>
Emerald Damselfly	<i>Lestes sponsa</i>	Norfolk Hawker	<i>Anaciaeschna isoceles</i>
Scarce Emerald Damselfly	<i>Lestes dryas</i>	Common Hawker	<i>Aeshna juncea</i>
Coenagrionidae		Migrant Hawker	<i>Aeshna mixta</i>
Northern Damselfly	<i>Coenagrion hastulatum</i>	Emperor Dragonfly	<i>Anax imperator</i>
Irish Damselfly	<i>Coenagrion lunulatum</i>	Lesser Emperor	<i>Anax parthenope</i>
Southern Damselfly	<i>Coenagrion mercuriale</i>	Hairy Dragonfly	<i>Brachytron pratense</i>
Azure Damselfly	<i>Coenagrion puella</i>	Gomphidae	
Variable Damselfly	<i>Coenagrion pulchellum</i>	Common Clubtail	<i>Gomphus vulgatissimus</i>
Red-eyed Damselfly	<i>Erythromma najas</i>	Cordulegastridae	
Small Red-eyed Damselfly	<i>Erythromma viridulum</i>	Golden-ringed Dragonflies	<i>Cordulegaster bontonii</i>
Large Red Damselfly	<i>Pyrhosoma nymphula</i>	Emeralds (Corduliidae)	
Common Blue Damselfly	<i>Enallagma cyathigerum</i>	Donwy Emerald	<i>Cordulia aenea</i>
Blue-tailed Damselfly	<i>Ischnura elegans</i>	Northern Emerald	<i>Somatochlora arctica</i>
Scarce Blue-tailed Damselfly	<i>Ischnura pumilio</i>	Brilliant Emerald	<i>Somatochlora metallica</i>
Small Red Damselfly	<i>Ceriagrion tenellum</i>	Darters, Chaser and Skimmers (Libellulidae)	
Platycnemididae		White-faced Darter	<i>Leucorrhinia dubia</i>
White-legged Damselfly	<i>Platycnemis pennipes</i>	Broad-bodied Chaser	<i>Libellula depressa</i>
* includes dark specimens in the north-west, formerly treated as a separate species <i>Sympetrum nigrescens</i> Highland Darter		Scarce Chaser	<i>Libellula fulva</i>
		Four-spotted Chaser	<i>Libellula quadrimaculata</i>
		Black-tailed Skimmer	<i>Orthetrum cancellatum</i>
		Keeled Skimmer	<i>Orthetrum coerulescens</i>
		Black Darter	<i>Sympetrum danae</i>
		Yellow-winged Darter	<i>Sympetrum flaveolum</i>
		Red-veined Darter	<i>Sympetrum fonscolombii</i>
		Ruddy Darter	<i>Sympetrum sanguineum</i>
		Common Darter	<i>Sympetrum striolatum</i> *

Damselflies		Dragonflies	
Common Name	Scientific Name	Common Name	Scientific Name
Emerald Damselflies (Lestes)		Hawkers (Aeshnidae)	
Southern Emerald Damselfly	<i>Lestes barbarus</i> **	Southern Migrant Hawker	<i>Aeshna affinis</i>
Willow Emerald Damselfly	<i>Lestes viridis</i> **	Vagrant Emperor	<i>Anax ephippiger</i>
Winter Damselfly	<i>Sympecma fusca</i>	Green Darner	<i>Anax junius</i>
Coenagrionidae		Gomphidae	
Dainty Damselfly	<i>Coenagrion scitulum</i>	Yellow-legged Clubtail	<i>Gomphus flavipes</i>
** - has bred. † - has bred in the Channel Islands		Darters, Chaser and Skimmers (Libellulidae)	
		Large White-faced Darter	<i>Leucorrhinia pectoralis</i>
		Scarlet Darter	<i>Crocothemis erythraea</i> †
		Banded Darter	<i>Sympetrum pedemontanum</i>
		Vagrant Darter	<i>Sympetrum vulgatum</i>
		Wandering Glider	<i>Pantala flavescens</i>

Table 3. Category C: former breeding species not recorded since 1970

Damselflies		Dragonflies	
Norfolk Damselfly	<i>Coenagrion armatum</i>	Orange-spotted Emerald	<i>Oxygastra curtisii</i>



BDS RECORDING SCHEME: LIST OF COUNTY DRAGONFLY RECORDERS

Please send your records to the correct County Dragonfly Recorder, who will send data to the BDS Recording Scheme.

Vice-County	County Dragonfly Recorder	Contact Details
England & Wales		
1. West Cornwall (with Scilly)	Adrian Eggett	1 Carne View Cottage, Crowtown Helston, Cornwall, TR13 0AA. Tel: 01326 712181. ajeggett@gmail.com . Website: www.timeandlightphotography.co.uk
2. East Cornwall	David Cooper	12 Ashfield Villas, Falmouth, Cornwall, TR11 2EU. Tel: 01326 311337. cestmaplace@live.co.uk
3. South Devon	Dave Smallshire	8 Twindle Beer, Chudleigh, Newton Abbot, TQ13 0JP. Tel: 01626 853393, E-mail: davesmall@btinternet.com
4. North Devon		
5. South Somerset	Chris Iles	Arborfield, Holcombe Hill, Holcombe, Radstock, Somerset BA3 5DN. Tel: 01761 239092. kifill22@hotmail.com
6. North Somerset	Position Vacant	Send to Chris Iles (VC 5)
7. North Wiltshire	Steve Covey	130, White Edge Moor, Liden, Swindon, Wilts, SN3 6LY. Tel: 01793 349040, E-mail: steve.covey@ntlworld.com , blog: http://wiltshire-dragonfly-news.blogspot.co.uk
8. South Wiltshire		
9. Dorset	Andrew Brown	Ground floor flat, 15 Lytton Road, Bournemouth, BH1 4SH Tel: 07891 573267. brown_a_r@yahoo.co.uk Website: www.dorsetdragonflies.org.uk , Facebook 'Dorset Dragonflies'
10. Isle of Wight	Jim Baldwin	21 Hillcrest Road, Rookley, Ventnor, Isle of Wight, PO38 3PB. Tel: 01983 721137 wightdragonflies@gmail.com
11. South Hampshire	Paul Ritchie	Tel: 07484 813372. paulritchie@hampshiredragonflies.co.uk
12. North Hampshire	David Murdoch	01962 808853. damurdoch@hotmail.com
13. West Sussex	Bob Foreman / Ben Rainbow	Records to Bob Foreman. Tel: 01273 497570. bobforeman@sussexwt.org.uk . Local enquiries to Ben Rainbow. ben.rainbow@ntlworld.com
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15. East Kent	John & Gill Brook	1 Barrack Cottages, Lower Street, Broomfield, Maidstone, Kent, ME17 1PU. Tel: 01622 862227
16. West Kent		
17. Surrey	Bill Budd	Tel: 07968 297045. rab@budd.demon.co.uk
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26. West Suffolk		
27. East Norfolk	Pam Taylor	Decoy Farm, Decoy Rd, Potter Heigham, Norfolk, NR29 5LX. Tel: 01692 670 311. E-mail: pamtaylor@british-dragonflies.org.uk
28. West Norfolk		
29. Cambridgeshire	Val Perrin	13, Pettitts Lane, Dry Drayton, Cambs, CB3 8BT. Tel/Fax: 01954 780467, E-mail: valperrin@aol.com
30. Bedfordshire	Rory Morrissey	25 Alwins Field, Leighton Buzzard, LU7 2UF. Tel: 01525 372477 dragonflies@bnhs.org.uk
31. Huntingdonshire	Val Perrin	See VC 29 above
32. Northamptonshire	Mark Tyrrell	8 Warwick Close, Raunds, Wellingborough, Northants, NN9 6JH. Tel: 01933 389 748, E-mail: mark.p.tyrrell@ntlworld.com , website: www.northantsdragonflies.blogspot.co.uk
33. E. Gloucestershire	Ingrid Twissell	Arfonia, The Green, Churchdown, Glos, GL3 2LE. Tel: 01452 714413, E-mail: canditwissell@btinternet.com
34. W. Gloucestershire		
35. Monmouthshire	Position Vacant	Send records to records@british-dragonflies.org.uk
36. Herefordshire	Evan Bowen-Jones	c/o Hereford Wildlife Trust, Lower House Farm, Ledbury Road, Tupsley, Hereford, HR1 1UT.
37. Worcestershire	Mike Averill	49 James Road, Kidderminster, Worcs, DY10 2TR. Tel: 01562 638571, E-mail: mike.averill@blueyonder.co.uk
38. Warwickshire	Peter Reeve	The Outspan, Leamington Hastings, nr. Rugby, Warwickshire, CV23 8DZ. Tel: 01926 632 400, E-mail: peter@reeve60.org.uk , website: www.warwickshire-dragonflies.org.uk
39. Staffordshire	Dave Jackson	11 Hyperion Drive, Penn, Wolverhampton WV4 5QW Tel: 01902 344716. jacksongrus@talktalk.net



40. Shropshire	Vicky Nall	45 Shropshire Street, Market Drayton, Shropshire, TF9 3DA. Tel: 07598 938660. info@shropshiredragonflies.co.uk. shropshiredragonflies.co.uk
41. Glamorgan ¹	Mike Powell	87 Coed Glas Road, Llanishen, Cardiff, CF14 5EL. Tel: 029 2076 2182 E-mail: mike.powell2@coorsbrewers.com
42. Breconshire ¹	Keith Noble	25 Belle Vue Gardens, Brecon, LD3 7NY, Tel: 01874 620133, E-mail: knoble.kn@btinternet.com
43. Radnorshire ¹	Bob Dennison	Maes y Geidfa, Crossgates, Llandrindod Wells, Powys, LD1 6RP. Tel: 01597 851 702. E-mail: rd19366@googlemail.com
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50. Denbighshire ¹		
51. Flintshire ¹		
52. Anglesey ¹		
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64. Mid-west Yorkshire	Simon Joseph	11 Sandholme Villas, Earby, Yorkshire, BB18 6NF. Tel: 07972 054098. simonjoseph1967@sky.com
65. North-west Yorkshire	Keith Gittens	As VC62
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70. Cumberland	David Clarke	
71. Isle of Man	Peter Hadfield	5 High View Road, Douglas, Isle of Man, IM2 5BQ. Tel: 07624 471794. iomodon1@gmail.com
Scotland		
From 72. Dumfriesshire to 112. Shetland Islands	Pat Batty	Kirnan Farm, Kilmichael Glen, Lochgilphead, Argyll, PA31 8QL. Tel: 01546 605 316, E-mail: pat@patbatty0.wanadoo.co.uk
113. Channel Isles	Position Vacant	Send records to records@british-dragonflies.org.uk
Northern Ireland and Eire	Damian McFerran	National Museums Northern Ireland, Cultra, Holywood, Co. Down, BT18 0EU Records: https://.nmni.com/CEDaR/CEDaR-submitting-records.aspx Facebook 'Dragonfly Ireland'
Migrant Dragonfly Project	Adrian Parr	10 Orchard Way, Barrow, Bury St Edmunds, Suffolk, IP29 5BX. Tel: 01284 810465. E-mail: adrian.parr@btinternet.com
Records Officer	David Hepper	12 Three Stiles Road, Farnham, Surrey, GU9 7DE. Tel: 01252 721053. records@british-dragonflies.org.uk

Very many changes have occurred in the names and mapped borders of Welsh counties in recent years. If you are unsure of which vice-county you have records for please make a 'best guess'. Once they have a grid reference they will be seen by the correct recorder for verification.

Any amendments or corrections? Please contact David Hepper: records@british-dragonflies.org.uk