

Spring 2019 Issue 36

# Darter

Magazine

British  
Dragonfly  
Society



**Learn to Love Dragonflies**  
with the FSC BioLinks Project

**and**

**Dragonfly Forests**  
making room for wetlands with the  
Forestry Enterprise

## Welcome

Welcome to the 2019 edition of Darter! This is my first Darter as Editor and I would like to thank all the volunteers who contributed articles this year. I know 2019 is going to be an exciting year with the release of our new website and lots of great surveys and exciting volunteering opportunities for you to get involved with!

Eleanor Colver, **Editor**



Cover image: Scarce Chaser © Ian Merrill

## From the Records Officer

David Hepper

2018 was a busy year for the Recording Scheme. Following the burst of training sessions for County Dragonfly Recorders that finished with a well-attended session at Rodley (Leeds) in March, I have continued offering remote support of iRecord to CDRs with their verification work. In addition to the thousands of records directly entered or imported by our CDRs each year, over 45,000 dragonfly records from the BirdTrack scheme of the British Trust for Ornithology were imported to iRecord in January this year, at least 25,000 of which have already been verified by the local CDRs. These had been building up at BTO over the years following successful efforts by my predecessor as Records Officer to interest other conservation organisations, including Butterfly Conservation, in recording dragonflies. BTO monitors are able to record dragonfly sightings as easily as bird sightings, directly into BirdTrack.

I'm now hoping to get our dataset in iRecord providing regular updates to the National Biodiversity Network's Atlas project. Due to formatting issues this is not straightforward but I can concentrate on the task now that the urgent push to get 2018 records verified has been achieved.

We're very grateful to all our volunteer CDRs and I'd like to mention those who have retired recently, including Sue Rees Evans, Evan Bowen-Jones, Ted Benton, John & Gill Brook and Paul Ritchie. We welcome Vicky Nall (Fletcher), Bill Budd, Damian McFerran, Steve Preddy, Chris Harris, John Roberts, Chris Meredith, Paul Winter. Please contact me if you know anyone local who would consider taking on County Durham or Kent, or helping with any other vice-county.

If you haven't submitted your 2018 records, or know of other caches of older records that haven't yet been entered, it is never too late. The most direct recording links are, as ever, <https://www.brc.ac.uk/irecord/enter-dragonfly-record> for single records and <https://www.brc.ac.uk/irecord/enter-dragonfly-list> for lists of species seen on the same day at the same location.

The Society's new public website is about to be launched and should be fully live by the time we have our Spring Meeting on the 30th March. Fiona and Ellie have made particular contributions to this project and we hope the full redesign will make dragonflies even more attractive both to the general public and to our members.

## Contents

3. Migrant and Recent Colonist Update
5. State of Dragonflies 2020 Report Update
6. Clubtail Count Project Update
8. FSC BioLinks Projects
10. County Dragonfly Recorder Updates
26. Highlights from Scotland
28. Dragonflies in Dumfries and Galloway
30. Workings in Partnership with the Forestry Commission in Lochaber
33. Rare Species or Rare Recorders







©Bernard Dupont

Southern Emerald Damselfly can be told apart from of Emerald species by their bicoloured pterostigma.

## Migrant and Recent Colonist Update

Adrian Parr, Migrant Dragonfly Project Coordinator

The year 2018 was to prove a highly dramatic one for migrant and dispersive species. 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.

**Willow Emerald Damselfly:** Further range expansion was noted during the year, with e.g. the first records for East Sussex and Berkshire being made in September. The most northerly known site in the UK is now at Kirkby-on-Bain, Lincolnshire, while the most westerly is at Stowe Gardens, Buckinghamshire. Further expansion is anticipated during 2019.

**Small Red-eyed Damselfly:** Several new area records were made during the year; the most spectacular find being of small numbers discovered on the Lizard peninsula in Cornwall, some 100 km away from any previously known site. This rather suggests a new immigration event, and further unexpected records from southwest England, might be made during 2019.

**Southern Emerald Damselfly:** It has had a good year in South-east England, with both local breeding and signs of fresh immigration. In addition to several coastal or sub-coastal records, a new but apparently already well established breeding site was discovered in Buckinghamshire, and a lone individual was noted in north Hampshire. Observers are encouraged to keep an eye open for this species, which is easily overlooked.

**Southern Migrant Hawker:** Good numbers were reported from the well-known (but only fairly recently established) breeding population around the greater Thames Estuary, but 2018 was most notable for a major immigration that saw scattered records along large parts of the English coast from Gloucestershire round to East Yorkshire, and inland as far as Hertfordshire and Bedfordshire. It seems highly probable that new breeding populations will have become established as a result of this influx, with favoured southern coastal grazing marshes perhaps being amongst the most likely areas.



**Norfolk Hawker:** Numerous sightings were made in southeast England away from known breeding sites. More noteworthy localities included Roxton and Felmersham in Bedfordshire, Fen Drayton in Cambridgeshire, Ipswich and Bawdsey in Suffolk, Holland Haven in Essex and also the London Wetland Centre, Greater London. In addition, a male was seen on the Exminster Marshes in Devon. This surge of unusual sightings probably results from a mixture of enhanced internal dispersal and immigration from the Continent, and it will be important to determine whether any new breeding populations have become established.

**Vagrant Emperor:** This species is now being seen in the UK with some regularity. During October and the first days of November 2018, records were received from some 30 sites – principally in southwest England, though a late surge of sightings also occurred along the Suffolk coast. On 20 October, several ovipositing tandem pairs were noted at a site on the Lizard peninsula in Cornwall, though it is anticipated that this breeding attempt will fail.

**Lesser Emperor:** With records from 35 sites in total, 2018 was the second-best year ever for the species in Britain. A significant proportion of sightings could

well have referred to locally bred individuals, and maybe the Lesser Emperor is finally starting to firmly establish itself in the UK.

**Yellow-spotted Emerald:** A male was discovered at Carlton Marshes in Suffolk on 2 July, this being a first for Britain. The species is an unexpected visitor, and further sightings do not seem particularly likely in the near future.

**Large White-faced Darter:** A male noted at Landguard, Suffolk, on 27 May is only the fourth British record. It is, however, the third in six years, and follows an individual seen at the same site back in 2012. The species has recently become more widespread on the near Continent, and future records along the east coast seem a distinct possibility.

**Red-veined Darter:** By modern standards it was a relatively quiet year for the species, particularly during the autumn (though small numbers apparently accompanied the Vagrant Emperor influx). Given recent trends, 2019 is likely to see a return to higher numbers.

Yellow-spotted Emerald was recorded for the first time in Britain in 2018



©Erik Astrom







Migrant Hawker ©Stephen Burch

Simple complete species lists are the backbone to our species distribution analysis

## State of Dragonflies 2020 Report Update

Pam Taylor, Dragonfly Conservation Group Convener

There is just one recording season left in which to collect data for this important BDS report, so what should you do? The obvious answer is of course to carry on recording, but there is more to it than that.

As we've stated time and time again, all records have value. Casual sightings, rarity reports and the results of single species surveys, like those currently operating for Common Clubtail and White-legged Damselfly, all have their place. Data from all of these, as well as dragonfly records coming in from BTO and Butterfly Conservation recording schemes, contribute to distribution maps and studies of range changes. Additionally, single species surveys are designed to focus on species of conservation concern and provide an insight into the possible reasons for any decline. In this way we hope to find ways to counter downward trends, identify conservation actions and increase populations once again.

For the State of Dragonflies 2020 Report we need all of the above, but also Complete Lists so that we can carry out trend analyses for all of our main species. This we will be doing in partnership with the Biological Records Centre, who also helped us with the trend analyses for the national atlas published in 2014. We need as many of you as possible out there this season recording Complete Lists of all the species you see on each visit to a wetland site. If you haven't already done so, please go back to any site you've recorded in the past and record it again. We need records from two separate years in order for

the site to be included in the trend analyses. Ideally the more visits the better, especially if these can cover the whole flying season from early spring to autumn. However, we fully appreciate that frequent visits to more remote sites simply isn't feasible. By the way, if you do record a Complete List, please don't forget to tick that box on the form or in iRecord.

By the time you read this all our verified data to the end of 2018 should be with the Biological Records Centre (who host iRecord). Statisticians there will be running preliminary analyses on this data over the summer. The results will then be fed back to the BDS in the autumn. Once we receive these preliminary results we will be able to start drafting text for the Report. All the main species will feature in the trend analyses, but it is our intention to highlight just a few species as special cases. It might be that a species is doing exceptionally well, for example newly colonising species such as Willow Emerald Damselfly and Southern Migrant Hawker. Conversely there may be species that are showing declines since the previous atlas was published. We already have some ideas about which dragonflies might feature particularly in the Report, but we won't know for certain until the results come through.

Records made and received this year, and verified by the end of January 2020, will then contribute to a second and final analysis of all the data early next spring. It is this second analysis that will be published in the Report. The results will also be used to make any necessary amendments to the texts and produce the overall conclusions.



**To make the State of Dragonflies 2020 Report as comprehensive and up-to-date as possible you have five tasks.**

- 1 Get out in the field and look for dragonflies.



- 2 Record all the species you see on each visit (adding abundance and breeding information if you can it will further enhance your records). Remember, even if you can't send a full list of species, we would still like your records.



- 3 Enter your results in iRecord (you can use the links in the BDS website) or send them on a spreadsheet to your County Dragonfly Recorder (CDR). BDS can provide a suitable spreadsheet for you to use and you can find your CDR's contact details in this magazine.



- 4 Ensure you tick the box online or indicate on the spreadsheet that your records come from a Complete List (if they do).



- 5 Sit back and relax next winter knowing that you have contributed vital data to an important statement about dragonfly populations.



# Clubtail Count Project Update

Eleanor Colver, British Dragonfly Society  
Conservation Officer

As the Clubtail Count Project enters its third year we are starting build up a better picture of the distribution and abundance of UK Common Clubtail populations.

This year the project will be looking for volunteers to survey sections of the following river systems:

**The Severn, Avon, Teme and Vyrnwy**  
**The Thames and Kennet**  
**The Teifi and Towy**  
**The Dee**  
**The Wye**  
**The Arun**

If you live near to one of these rivers and have time to do carry out 3 surveys between May and July we would love for you to join us!

The survey is easy: all you need to do is take a relaxed stroll on a sunny day and look for Common Clubtail adults and exuviae (shed larval skins) along the banks of the 1km stretch of river you select to survey. If you're lucky you may even get to witness this rare sight of a Clubtail undergoing emerging from its larval form and taking its first flight as an adult!

This is a great summertime activity for rookie dragonfly enthusiasts as the Common Clubtail is so easy to identify and the survey is nice and simple.

If you're interested, drop us an email at [conservation@british-dragonflies.org.uk](mailto:conservation@british-dragonflies.org.uk) You can also find more information on the Clubtail Count Project page on the BDS website.

## Results 2018



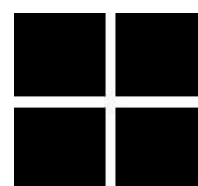
**461**

Common Clubtail records



**145**

volunteers took part



**58**

monads were surveyed



### Thames

The 2018 results for the River Thames are troubling, with a number of sites that were positive for Clubtail in 2017 being reported as negative, and a decline in sightings within the stronghold near Goring. However, 50% of the loss sites only received one survey visit in 2018, so it is possible that the presence of Common Clubtail may have been missed.

### Kennet

Clubtails have still not been found on the River Kennet as of 2018, despite historic records.

### Avon

While historic records would suggest that Clubtail were once widespread on the River Avon, after two years of the Clubtail Count, only one surviving site has been confirmed.

### Severn

The 2018 results would suggest that Clubtail declined on the lower River Severn, with a couple of sites that were positive for Clubtail in 2017 being reported as negative, and a decline in sightings around Tewkesbury.

Results for the middle River Severn appear relatively stable with no new losses or gains.

Results from the upper River Severn look promising, as multiple new Clubtail sites were identified, and most of the repeat survey sites supported Clubtail again in 2018.

### Teme

A number of historic sites on the middle and lower sections of the River Teme were confirmed to still support Clubtail.

### Vrynwy

Results for the River Vrynwy were mixed with a monad loss from 2017 to 2018 but two monad gains.

### Dee

The River Dee continues to be one of the most stable strongholds for Clubtail in the UK, with no new losses, gains to the north and south, and a continued presence of Clubtail at repeat survey monads around Holt.

### Wye

The River Wye performed well in 2018, particularly around Monmouth where multiple new sites were discovered. Further north results were more mixed, with the loss of multiple repeat survey.

### Arun

The River Arun is under recorded compared to the other river systems. However, the few results produced for 2018 indicate the populations South-west of Storrington as being relatively stable.

### Teifi

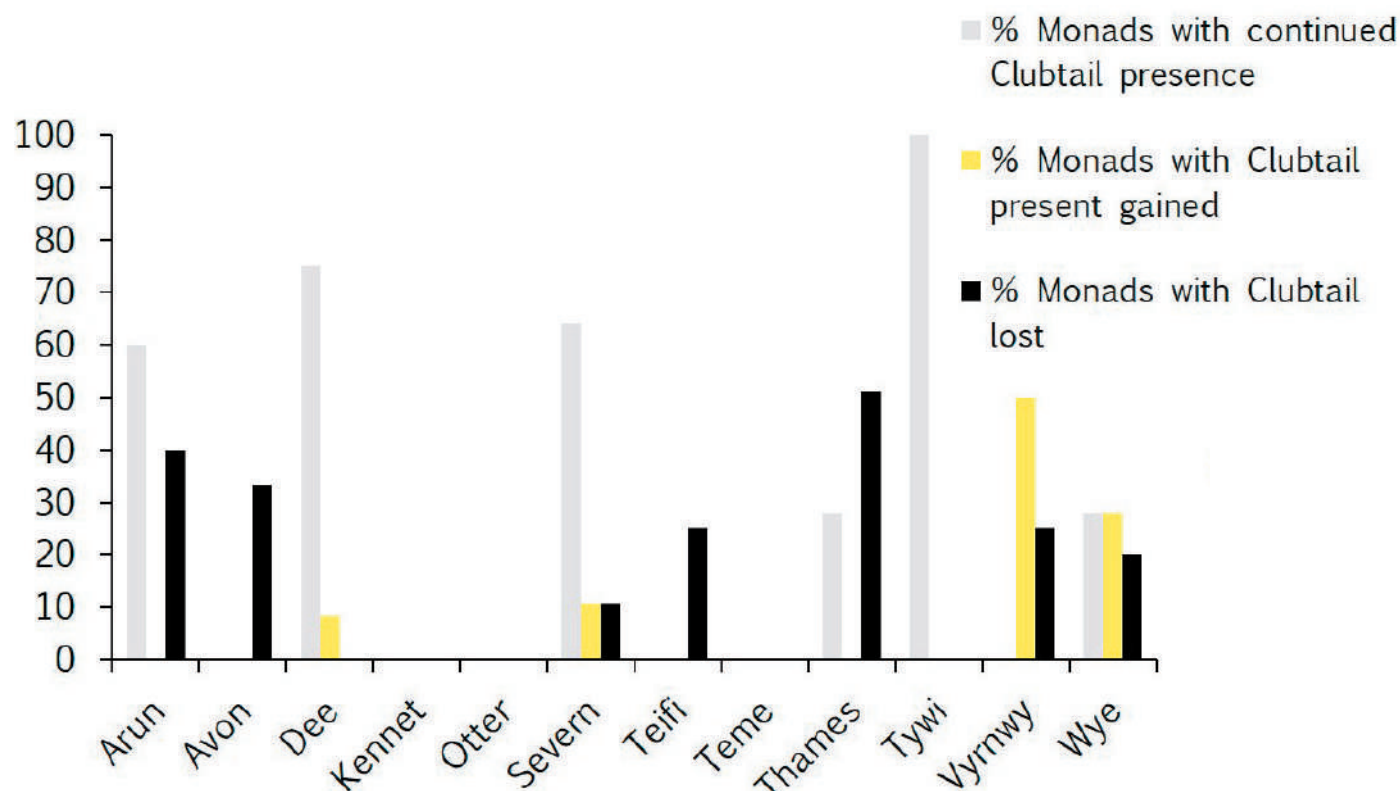
Clubtail have not yet been located on the River Teifi by the Clubtail Count so far.

### Towy

On the other hand, one historic site on the River Towy was found to still support Clubtail in small numbers this year.

### Otter

After the first Clubtail was sighted on the Otter in 2017, none were seen again in 2018.





# FSC BioLinks Project

Supporting invertebrate recording across the West Midlands and South East

Charlie Bell, FSC BioLinks Project Officer

FSC BioLinks is an exciting new biodiversity project for the Field Studies Council (FSC), funded by the National Lottery Heritage Fund (NLHF), running from 2018 to 2022 inclusive.

## What is the FSC BioLinks Project?

It's all about invertebrate identification. The aim is to build and strengthen the biological recording community by providing training, learning opportunities and digital tools for people involved in biological recording – especially those who want to record invertebrates.

The project focuses on eight invertebrate groups: arachnids, flies, bugs, beetles, freshwater invertebrates, soil invertebrates, slugs & snails and bees, wasps & ants. We hope to offer something for everyone, whatever your current

level of experience. Training opportunities are provided at all levels from beginner to expert, with a training pathway allowing people to progress and consolidate their skills. The hope is that the project will increase the quality and quantity of invertebrate species data being submitted to our national biodiversity datasets and improve our understanding of those data.

Dragonflies and damselflies are included within the 'freshwater invertebrates' category – we are running courses on both adults and larvae, as well as exuviae. For more details see the paragraph and links at the end of this article.

A key aim of BioLinks is to remove barriers to people becoming involved in invertebrate recording. Because of the funding from NLHF our training courses can be offered at a highly subsidised rate - £5 for a day course and £50 for a weekend residential. A real bargain price for courses taught by regional and national experts!

## Learning dragonfly anatomy and biology



The project is split between two regions – the West Midlands and the South East. In the West Midlands, Bishops Wood field centre (near Kidderminster) and Preston Montford field centre (Shrewsbury) are being further developed as hubs for this sort of invertebrate ID training. In the South East, centres in the London Region but especially FSC Bushy Park are being developed as training hubs. This development includes the purchase of some exciting new kit – dissecting and compound microscopes, plus lots of other field equipment including hand lenses, sweep nets, collecting trays and pooters. We have also begun buying and curating libraries of field guides, keys and other identification resources.

Training will also be provided at other non-FSC locations, building new relationships between the FSC and various partners, as well as reaching new audiences. We've found that people new to recording often feel more comfortable attending a workshop at a familiar local venue, such as a village hall or community centre, rather than an official 'field centre'; so we're going on the road and bringing the training to them!





## Open Lab Days

Identifying and recording invertebrates often involves the use of both a microscope and identification books and keys, which can sometimes be a barrier to recorders due to the expense of purchasing such equipment. So to complement our more formal training courses, we are running free, informal 'Open Lab Days' for local invertebrate recorders of any level of experience to work on their invertebrate ID skills, and/or catalogue and maintain their invertebrate collections. A classroom, microscopes, and a library of reference books are made available, with the days designed to be fun and sociable. Project staff provide support and guidance and attendees are welcome to come for the full day, or drop in for part of the day. For dates and more details see [www.fscbiodiversity.uk/openlabdays](http://www.fscbiodiversity.uk/openlabdays)

## How did the first year go?

In 2018 in the West Midlands, 19 One-day Training Courses, four Weekend Residential Courses, eight Open Lab Days, one Collections Workshop, three Recorder Days and two Regional Recorder Conferences have been run or supported by the project. 254 places on training courses have been taken up, by 145 different individuals. Similar statistics have been achieved in the South East.

Our Digital Development Officer, Rich Burkmar, has been working on developing some brilliant digital tools to aid biological recording. For more information on the digital elements of BioLinks, including the IdentiKit tool for creating your own online multi-access identification keys, please see our website: [www.fscbiodiversity.uk](http://www.fscbiodiversity.uk).

The long, hot summer was both a challenge and an opportunity – we didn't have to roll out many 'wet weather contingency' plans, but the prolonged dry spell did mean that populations of some invertebrates were low, and life cycles were completed much earlier in the year than normal. However, we were lucky on all our Odonata training courses, with both our Field ID of Dragonflies and Field ID of Damselflies courses proving popular.

We've seen some fantastic species on our courses – some rare, some stunningly beautiful, some common, but all completely fascinating. 950 records have been made on BioLinks training courses this year, of 490 different species. One of the joys of a BioLinks course is that everyone shares a love of nature in general and invertebrates in particular. However, this does mean that we can be easily distracted by non-target taxa! We never find one group of species in isolation, and once you acquire the habit of looking, you see more and more 'other stuff'.

The stars of the 2018 were some incredible hornet-mimic clearwing moths, called, un-originally, hornet moths (*Sesia apiformis*) – a Nationally Scarce species. A sharp-eyed attendee on our Field ID of Flies course at Bishops Wood, Worcestershire, spotted a mating pair near the base of a tree trunk.

## What's planned for 2019?

We've got an exciting programme of identification training courses planned for this year. In terms of dragonflies, come along to any (or all!) of the following: Learn To Love Dragonflies, Field ID of Dragonflies, Field ID of Damselflies, and Dragonfly Larvae and Exuviae Identification. Hopefully you should be able to find the correct entry level course for you, then progress up the different levels.

The 2019 BioLinks courses are being released for booking throughout early spring - if you're inspired to look more closely at the little things that make the world go round, check out for BioLinks courses here: [www.fscbiodiversity.uk/courses](http://www.fscbiodiversity.uk/courses)

To receive the latest news and updates on the project, plus notifications when the next batch of courses are released, please sign up for the BioLinks Newsletter: [www.fscbiodiversity.uk/biolinks-signup](http://www.fscbiodiversity.uk/biolinks-signup)

## Damselfly identification course at Bishops Wood



# The British Demoiselle Photography Project

Dr Jonathan Drury, Durham University

Test your photography skills and help scientists discover the secrets of one of the UK's most beautiful dragonflies.

## What is the project?

Just before the 2018 flight season, we launched a citizen science project aimed at recruiting members of the public to submit photographs of Demoiselles to iNaturalist.org ([www.inaturalist.org/projects/british-demoiselles](http://www.inaturalist.org/projects/british-demoiselles)). During the flight season, we visited several sites throughout England, photographing males and females of both species.

## What have we learnt?

While the project is still in its infancy, we have learned three main things so far:

1. We can extract high quality data about wing colour from the photographs that are submitted by amateur naturalists.
2. For banded demoiselle males, early emerging individuals tend to have relatively smaller wing spots than later emerging individuals.
3. Previous research suggested that male banded demoiselles evolve smaller spots when they are at rivers with Beautiful Demoiselles in response to territorial and mating competition (i.e., Banded Demoiselle males with smaller spots get into fewer territorial disputes with the black-winged beautiful demoiselles). However, in our analyses, we failed to find any difference in the wing colouration of male Banded Demoiselles that exist with Beautiful Demoiselles and those that do not.

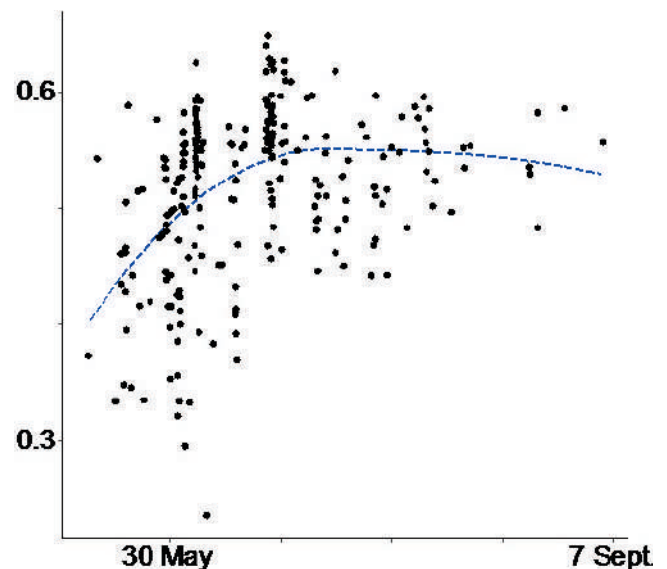
We report these results, along with other details in a scientific manuscript (Continent-scale phenotype mapping using photographs from citizen scientists) available at [www.biorxiv.org](http://www.biorxiv.org)

## What next?

These findings are only the beginning. In the future, we will develop new methods to extract measurements of female wing colour (e.g., how light or dark they are), in order to test whether female traits might respond evolutionarily to mating competition between species. We also plan to use the methods and findings developed in Britain to serve as a case study for expanding analyses to the entire range of banded and beautiful demoiselles.

To continue building on our analyses, we hope that BDS members, who were an integral part of last flight season's success, will continue to observe and submit observations of beautiful and banded demoiselles throughout Great Britain.

Proportion of wing surface pigmented in male Banded Demoiselle





## Banded Demoiselle

Female: Metallic green with green tinged wings

Male: Metallic blue with banded wings

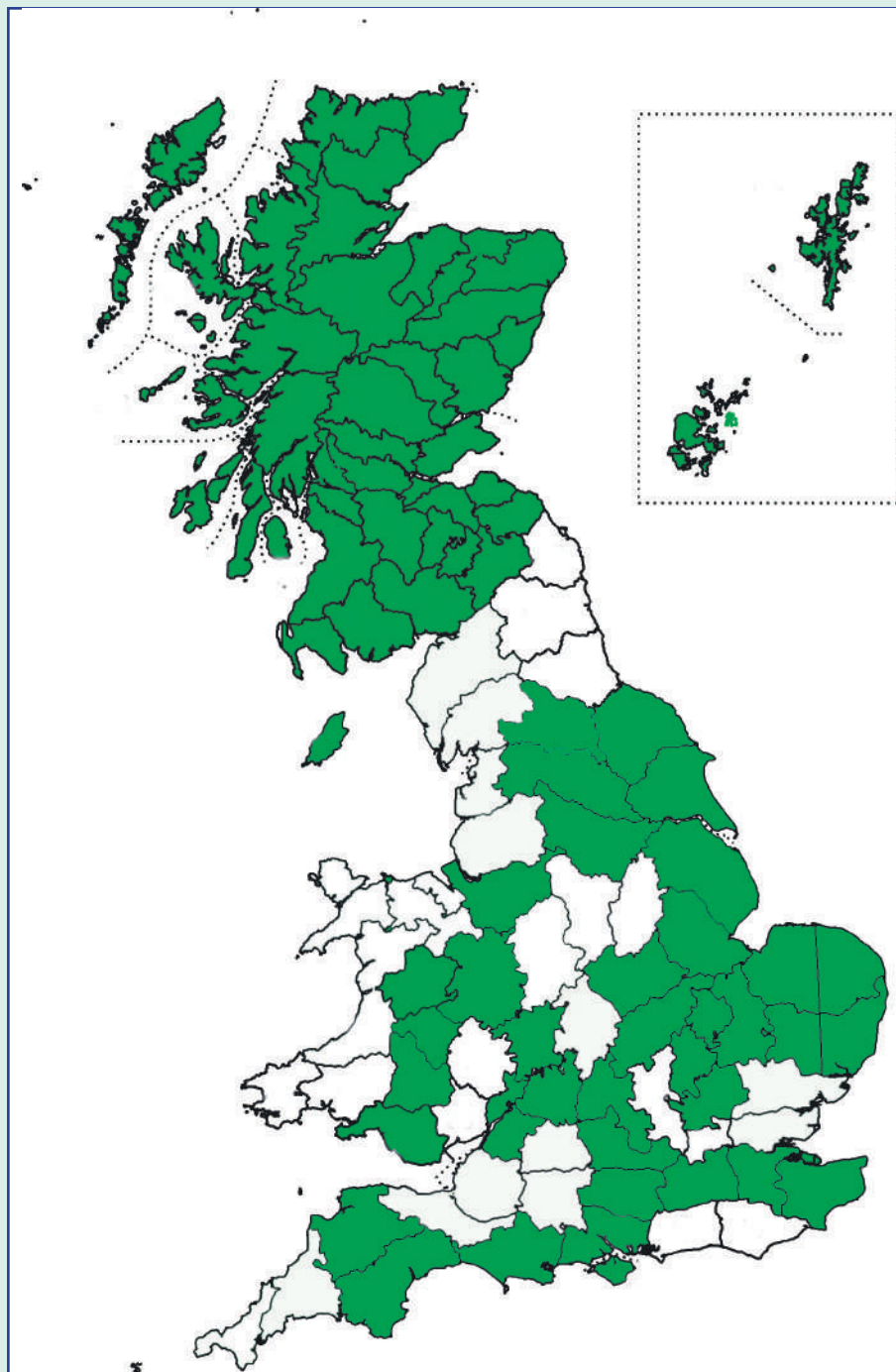


## Beautiful Demoiselle

Female: Metallic green with brown tinged wings

Male: Metallic blue with dark wings





Vice county map. Vice Counties for which 2018 accounts have been written are coloured in green.

### Devon - VC 3 & 4

*Dave Smallshire*

The midsummer warm spell worked wonders for dragonflies, giving us what was probably the best year since 2006. Small Red-eyed Damselfly had an excellent year and spread to several new sites. At least 310 were at Lower Bruckland Ponds on 20 July (the most ever recorded at a Devon site), and there were at least 5 at Dawlish Warren. Other counts included 100+ at Squabmoor Reservoir, 27 at Ventiford Ponds, 15 on Exminster Marshes ditches,

6 at Seaton Wetlands on 31 August, 50+ at Little Bradley Ponds and up to 30 at four other Bovey Basin sites, including the first records for Stover. Well outside the existing range was a record at Shobrooke Park fishing lakes.

Red-eyed Damselflies were reported from Stover (25), Ventiford Ponds (15), Grand Western Canal (215 in just two sections), Decoy Lake (6), River Exe near Double Locks (2) and Little Bradley Ponds (up to 4,

including the first evidence of breeding).

Southern Damselfly monitoring in East Devon produced peaks of 163 at Aylesbeare Common, 27 at Venn Ottery Common, but no more than 6 at Colaton Raleigh Common (where Small Red Damselflies seem to be doing well). Sadly, none was found at the Hense Moor (Blackdowns) re-establishment site. On Dartmoor, numbers were reasonably stable at Tor View Moor and Prewley Moor, but there is some concern about numbers at Moortown Bottom. The BDS meeting on 15 July in the Cadover Bridge area found 60 Scarce Blue-tailed Damselflies at two sites. A new site for Small Red Damselfly was found (with breeding Common Hawkers as well) and another small one was identified near Squabmoor Reservoir.

Downy Emeralds and Hairy Dragonflies were seen as usual at Little Bradley Ponds, Stover and Decoy Lake, and at Ventiford Ponds for the first time. Scarce Chaser had an excellent year, with 46 at Exminster Marshes; 39 on 5 sections of the Grand Western Canal; and 8 (with 2 Hairy Dragonflies) at Darts Farm. New Scarce Chaser sites were discovered at Double Locks, the Lower Otter Valley and the Clyst Valley.

The dragonfly highlight of the year was a male Norfolk Hawker along reedy ditches at Exminster Marshes on 12-13 July, the first record for Devon and South-west England. A Brown Hawker at the Grand Western Canal on 6 July was the second record for Devon. A male Lesser Emperor patrolled Key Transport Pond in the Bovey Basin on 22 July. Rather frustratingly, a photograph of a very blue hawker at East Soar on 6 September wasn't good enough to add Southern Migrant Hawker to the Devon list. A female Red-veined Darter was at Prawle Point on 13 October.

The Stover Dragonfly Hotspot will be officially launched on Saturday 1 June 2019. If you would like to help out on the day, please contact me



(davesmall@btinternet.com or 01626 853393).

### **Dorset – VC 9**

*Andrew Brown*

Greeting from Dorsetshire! Last year seemed to go past in the blur, I guess that's what happens with age!

Generally it's good to see that the number of recorders and records is keeping steady if not slowly increasing as more people get out looking for, and recording, dragonflies. We had over 1500 records this year from over 50 individual recorders and from groups such as the Dorset Wildlife Trust, National Trust, Christchurch and East Dorset Council, and I thank everyone for their contributions. Slowly but surely we are working towards the publication of a Dorset guide/atlas as the last one was published in the 80's. If anyone has written a county atlas before and wants to give me some help and advice this would be fantastic!

The most exciting news from Dorset in 2018 is that Lesser Emperor now appear to be breeding at Longham Lakes, and also the arrival of another spectacular migrant: the Southern Migrant Hawker, which was first spotted by Ian Ballam. Around 5 individuals turned up in Lychett Bay, Poole, and stayed for a few days... and guess what, on the day I went to see them it was very windy and a no-show! In 2017 a Vagrant Darter was spotted along the Jurassic coast and photographed so it would appear that Dorset is getting more overseas visitors, and with more recorders out and about we are getting some good records.

On another note, help is needed to fund the Dorset Dragonfly website [www.dorsetdragonflies.org.uk](http://www.dorsetdragonflies.org.uk). Not only do I want to keep the site going, but it needs updating with the many new migrant species Dorset is now attracting. Please feel free to get

in touch with me (brown\_a\_r@yahoo.co.uk).

### **Isle of Wight – VC 10**

*Jim Baldwin*

The 2018 flight season on the Isle of Wight commenced on 21 April, 12 days later than 2017, with a newly emerged Large Red Damselfly at East Cowes, and concluded on 3 November with a Common Darter at Newchurch. Pleasingly, there was an increase in the number of records received for the 24 species seen, in comparison to 2017.

It appears that the small breeding colony of Southern Emerald Damselfly is becoming established at Bouldnor Nature Reserve. Peter Hunt, the original finder of this species in 2017, maintained regular visits to the site in 2018 and recorded a flight period commencing with seven immatures on 1 June, and finishing with a male and a female on 10 October. Maximum numbers were recorded on 14 August with 10 males, 2 pairs ovipositing and 2 pairs in cop. The first sighting of Downy Emerald, at Newchurch, on 15 May was the earliest reported date for this species for the county.

Scarce Chaser was recorded at its two usual private breeding sites in south-east Wight while Keeled Skimmer was sighted near Walpen Chine in addition to its two regular sites at Blackgang Terrace and Rocken End, Niton. Beautiful Demoiselle and Golden-ringed Dragonfly were also reported further east of their normal range, possibly due to an improvement in the water quality of the Island's rivers.

There was another good influx of Red-veined Darter recorded with the first sighting of a male at Shepherd's Chine on 2 June followed by another male at Ventnor revetment the following day. The remainder of the records came from two reservoirs in the Atherfield area between 6 and 27 July, with a maximum count of 15

on 18 July while ovipositing was recorded from both reservoirs.

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

### **South Hampshire – VC 11**

*Paul Ritchie*

Having taken on the CDR role in early 2018 I am still in the process of building a database, so comparisons with previous years will have to wait until Darter 2020!

At the time of writing 3253 records have been entered for 2018 compared with 2466 for 2017. After the "Beast from the East" there was a late start to the 2018 season with the first Large Red Damselfly photographed in Totton on 14 April and no other species reported until 1 May when a Hairy Dragonfly was seen at North Solent NNR. However, the warmth of late spring seemed to bring out the summer species early with Southern Hawker seen flying in two areas on 3 June.

### **Norfolk Hawker recorded for the first time in Devon**



©Dave Smallshire

Although, perhaps due to the hot summer, the season appeared to be a little curtailed, except for Common Darter which was last seen flying on 9 December at Testwood Lakes.

On the migrant front four male Red-veined Darters were found on Southampton Common on 13 June and three more males were found on 7 July. A male was photographed at Somerley on 23 June and small numbers were also present between 27 June and 4 August at Ripley Farm Reservoir with mating and egg-laying observed. One or two Lesser Emperors were present in July at Blashford Lakes but usually only seen distantly. An

**Dainty Damselfly are clinging on in Kent**



© Gill Brook

excellent find by Stuart Topps was South Hampshire's third Southern Migrant Hawker record at Titchfield Haven on 12 July. The insect fortunately stayed long enough for the CDR to twitch it on 24th! Last of the migrants was South Hampshire's fifth Vagrant Emperor, a female found and photographed by John Langmaid in his Southsea moth trap on the 5 October.

Thanks to all who submitted records in 2018.

### **North Hampshire – VC 12**

*David Murdoch*

Yes, the hottest summer for decades, but a disappointing season in North Hampshire, with no vagrants or range extensions. We are still waiting for our first Willow Emerald Damselflies, now long overdue.

North Hampshire splits roughly into two geological areas. The sandstone and clays of the north and north-east are one of the richest areas for Odonates in the country. Sites such as Bramshill and Warren Heath held good numbers of rarities, such as Hairy Dragonfly, as well as Downy and Brilliant Emerald. An interesting observation from Warren Heath on 7 July was of several Brilliant and Downy Emeralds feeding on midges in the centre of the lake at 7.30 am! White-legged Damselfly is very scarce, so a series of records confirming its presence along the Whitewater are welcome.

In contrast, the porous Hampshire chalk is one of the poorest areas, seeming to lack widespread species such as Brown Hawker and Common Emerald Damselfly, so several 2018 records of each from the Andover area were a surprise. Emerald Damselfly larvae are active feeders and susceptible to the attentions of fish, and these is an abundance of trout here, so it will be interesting to see if a colony establishes. The Test valley was, as usual, poorly covered, as fishing rights prevent access to most of it. However, Golden-

ringed Dragonfly did well and several, possibly teneral, were seen well away from water. Small Red-eyed Damselflies appeared in new ponds but there are still no records of Southern Damselfly in North Hampshire. I would be grateful if volunteers could search well-vegetated side-streams in the upper Test or Itchen. If a colony is found it would signify a significant range extension.

### **Kent – VC 15 & 16**

*John and Gill Brook*

Despite the long hot summer, 2018 was a fairly quiet year, perhaps partly due to the fact that we spent less time out in the field. There was a very marked reduction in the numbers of Migrant Hawkers compared with previous years.

We received records of the Norfolk Hawker from six locations but only small numbers were seen.

The Southern Migrant Hawker has spread and has now been recorded in 18 tetrads (an area the size of four 1km squares), which includes Sandwich Bay, Oare Marshes, and Rye Street. A total of 22 exuviae were collected from two sites in 2018 which was the highest total for one year. In 2017 a new breeding colony of Southern Emerald Damselfly was confirmed on the Grain Peninsular but an extensive search in 2018 was unsuccessful in finding any adults or exuviae. It still continues to do reasonably well at Cliffe where 10 exuviae were collected on one visit.

There are now 67 tetrads scattered all over Kent for Willow Emerald Damselfly. A total of 22 exuviae were collected from three sites, 17 of which were from one site. At a new location near the north coast of Kent, Derek Tutt observed numerous pairs of Willow Emerald Damselflies ovipositing into a young oak tree and a wild rose. Later observations showed that there



were also ovipositing marks in hawthorn and Great Willowherb.

Collecting exuviae often gives a clearer indication of the number of individuals having emerged than the number of adults seen on the wing. In 2018 a total of 54 Dainty Damselfly exuviae were found, 52 from one pond, although only small numbers of ovipositing pairs were noted. At the second site no adults or exuviae were seen in 2017, but a few adults and one exuviae was found in 2018, so hopefully these will increase. On a visit to the marshes on the mainland we were surprised to see one tandem pair of Dainty Damselflies on a dyke, but found none on a second visit. We hope that this may indicate a slow spread from the original sites.

### Surrey – VC 17

Bill Budd

Having As has often been the case recently, the flight season started at the Wandle in SW London, with Large Red Damselfly, Banded Demoiselle and Azure Damselfly all being seen by David Element on 14 April, although the first record from outside London was not made until 5 May: a Broad-bodied Chaser seen near Cranleigh by Neil Willis. It finally closed with a sighting of Common Darter at the London Wetland Centre (LWC), by Jake Klavins, on 2 December.

A total of 31 species were recorded in 2018, including a first record for the vice county of Norfolk Hawker, seen by Richard Bullock at the LWC on 6 June and again later in the month. The two records of Southern Migrant Hawker, one seen at Wimbledon Common on 16 July by Simon Riley and up to 31 July by various observers, plus one seen at Papercourt Marshes on 2 August by Joseph Hobden, represented the second and third records for the vice county (the first was at Kew Gardens in 2016).

A Lesser Emperor was seen at the London Wetland Centre on 13

June by Brian Walker, but Red-veined Darter was not seen this year (there were several records from the 2017 influx, from South-west London).

The River Tillingbourne, near Guildford, is a new site for Scarce Chaser, where a pair in cop were seen on 2 June by John Austin. Apart from a record at the LWC in 2017, this is the first record for several years, and may indicate a previously unknown population.

The few records of Common Hawker now seem to be restricted to Thursley and nearby Commons. Golden-ringed Dragonfly and Brilliant Emerald were only reported in small numbers in the west of the county, with an outpost on the River Tillingbourne, although the latter species was also recorded on Esher Common further north. Many thanks to all who submitted records in 2018, and I hope to hear more from you in 2019.

### Hertfordshire – VC 20

Roy Woodward

The warm, largely dry weather that we experienced during

2018 made it a very good year for dragonflies, although some populations are likely to have suffered as a result of some ponds and ditches becoming dry.

One species that can survive in, and even favours, ponds that dry out during the summer is the Southern Migrant Hawker. It was an exception year for this species nationally with records of new immigrants, or dispersing individuals, from many counties. Hertfordshire's first record of this species was of a female at Hertford heath on 8 July. This was followed within the next two weeks by two males at Kingsmead, at least one male at Rye Meads and a male at Hertford Heath, with the latter believed to have formed a mating pair with a female.

After having been recorded from Amwell for the last few years, Norfolk Hawkers showed signs of dispersal and were recorded at nearby sites, including several patrolling males at Rye Meads.

Two other species that have previously only rarely been recorded in Hertfordshire also seem to have wandered during

### Broad-bodied Chaser



©Rory Morrissey

the good weather. Male Beautiful Demoiselles were seen near Bishops Stortford, at Hertford Heath, and along the Cuffley Brook. All are likely to have originated from a population that recently became established just across the Middlesex border at Forty Hall. In addition, I was in the right place at the right time, when a female Keeled Skimmer settled near me at Hertford Heath on 27 June.

All of the above mentioned species, apart from Keeled Skimmer, are likely to either already be breeding in the county, or to begin to do so in the near future.

Scarce Emerald Damselfly, Willow Emerald Damselfly, Lesser Emperor, Scarce Chaser, and Red-veined Darter, were also recorded during 2018, and may all be breeding, at least in small numbers.

### **Berkshire – VC 22**

*Mike Turton*

The cold wet Spring delayed the start of the flight season with Large Red Damselfly not being recorded until 20 April. However, the following months more than

made up for this with a record number of sightings between May and August. Many of the records came from the centre of the county; we could do with more from the Maidenhead, Bracknell and Windsor areas and the Kennet valley. Records of heathland specialists in particular are down as a result of the reduced coverage around Bracknell.

June saw only the 2nd record of Scarce Chaser for the county, this time in the north at Farmoor. Whilst Berkshire missed out on the Southern Migrant Hawker influx, there was a record of Lesser Emperor at Thames Valley Park near Reading in July. A new arrival was Willow Emerald Damselfly, which made an appearance in Berkshire in September with single-figure records (including a mating pair) from two locations in Windsor Great Park.

Records of White-legged Damselfly have been scarce over the past 10 years or so, so the national survey provided useful data on the current status of this species with records from many of the sites, including some along the River Thames, where it has not been recorded for some time. Particular thanks go to Nick

Percival for his sterling efforts in visiting so many sites.

Common Clubtail numbers continue to cause concern with the lowest counts for several years. Similarly there were only 3 records of Brilliant Emerald, although this species may be under-recorded as a number of sites around Bracknell were not visited. Downy Emerald, on the other hand, seems to have done well with records from several new sites.

Common Darter was the only species recorded beyond the end of October with the last record on 30 November.

### **Oxfordshire – VC 23**

*Stephen Burch*

The season started slowly after the long and cold winter. The first record, from Stratfield Brake, was of a Large Red Damselfly, on 22 April, but the first dragonfly sighting was not until 6 May, a Hairy Dragonfly at Otmoor. This species continues to expand its range locally, and it was also recorded at the Trap Grounds and Stratfield Brake. Downy Emerald is another early season county rarity. In 2018 there was only two records: an adult was seen at Otmoor on 19 May, and a larva was found in Stratfield Brake lake on 1 May.

The BDS Clubtail Count Project continued and, like last year, a small number of exuviae, as well as flying and emerging adults were recorded on the River Thames, downstream from Goring. There were, however, only two records further upstream: one at Port Meadow on 28 May, and one at the Chimney Meadows BBOWT site on 21 May. Unlike 2017, there were several reports of White-legged Damselflies. Most were along the lower reaches of the Thames, but a few were reported from the opposite end of the county, at the Lamb's Pool BBOWT site and Warwick Spinney.

### **White-legged Damselfly**





Extended hot weather conditions led to good numbers of the more common species being reported, with many appearing earlier than usual. It was a good year for Emerald Damselflies which were seen at four sites, including Otmoor and the Trap Grounds. There was also the second Oxfordshire record of Small Red-eyed Damselfly, which was found near the southern vice-county border at Reading East Gravel Pits on 5 July. The hot summer did not, however, produce any new species for the county. The last record was of a Common Darter at the Trap Grounds on 26 October.

Due to the move to iRecord there has been a large increase in the number of records reported with over 1000 received for 22 species (compared to about 400 records for the same 22 species in 2017). Further details can be found at [www.stephenburch.com](http://www.stephenburch.com)

### Suffolk - VC25 & 26

*Adrian Parr*

With numerous major highlights, 2018 was probably the most dramatic year ever for dragonflies in the county. A male Large White-faced Darter was noted on the coast at Landguard on 27 May. This is only the fourth-ever British record, but follows one seen at the same site back in 2012. An even greater rarity was then noted at Carlton Marshes on 2 July: the male Yellow-spotted Emerald, discovered by Andrew Easton, being a first for Britain! The Southern Migrant Hawker influx noted during the summer over much of southern England made its presence felt in Suffolk, although numbers reported were not high. Sightings of immature females at Walberswick on 6 July do, however, raise the possibility that the species may have already colonised the county even before the recent influx. Following the dramatic run of migrants over the summer, there was then another surge of activity in the autumn. A total of nine Vagrant Emperors were noted from five sites along the coast between 20

October and 1 November, this being considerably more than all previous records put together! Kessingland held the greatest number of individuals, and small numbers of Red-veined Darter were also noted here and at a few nearby sites over the same period.

In addition to the spectacular events with migrant species, some residents also produced significant records. Scarce Emerald Damselfly is a relatively recent colonist to Suffolk, and 2018 saw several new breeding sites discovered in the north of the county, including Little Ouse headwaters and a site north of Elmswell. A single individual was also seen at Foxburrow Farm SWT Reserve in the south of the county. Norfolk Hawkers turned up unexpectedly in an Ipswich garden on 27 May and at Lakenheath Fen, Boyton and Bawdsey during late June, while White-legged Damselfly was discovered at a new site on the River Brett on 11 June. There were, however, relatively few reports of White-legged Damselfly from the species' known sites along the River Stour (though these sites do tend to be under-visited).

### Norfolk - VC 27 & 28

*Pam Taylor*

Norfolk lacked most of the migrants that appeared elsewhere. Even the Vagrant Emperor that turned up at the James Paget Hospital was officially in VC East Suffolk. Norfolk could, however, claim the Keeled Skimmer that appeared at Redgrave and Lopham Fen, because it was spotted north of the River Waveney.

There was one verified report of Red-veined Darter from Winterton Dunes in late August. The report from East Hills in West Norfolk in late October was probably a Common Darter. Norfolk Hawker was observed in good numbers at all its regular Broadland sites and the population at Thompson Water in the Brecks is continuing to expand. Other sightings were reported from Felbrigg Lake and Shotesham.

The Roydon Common and Grimston Warren complex is continuing to thrive. The Scarce Blue-tailed Damselflies in a remote part of the reserve numbered at least 131 individuals last June. At the same site, a handful of Scarce Emerald Damselflies were again seen.

### A Keeled Skimmer was recorded in Norfolk in 2018



©Ingrid Twissell

These reserves also support an ever-increasing number of Keeled Skimmers thanks to the restoration work that has taken place in recent years. One site giving concern is Scarning Fen. With the hot, dry summer of 2018 there were (to the best of my knowledge) no observations of Small Red Damselfly. I did however receive negative reports from people who had searched for the species without success. We can only await 2019 with trepidation, since this damselfly normally has a two-year life cycle.

Finally Lesser Emperors appeared at the Trinity Broads of Ormesby, Filby and Rollesby for at least the fifth year in succession. The first sighting was in the middle of June and the last near the end of July. Single individuals were also seen at Felbrigg Lake on three dates in July. An apparently immature individual was reported from Winterton Dunes on 18 September.

### Cambridgeshire and Huntingdonshire – VC 29 & 31

*Val Perrin*

Recording continued apace in Cambridgeshire during 2018, with many recorders entering data in either Living Record or iRecord. As well as assessing new sites,

the emphasis was on recording complete species lists in previously known sites. I have also been urging recorders to look out for White-legged Damselfly, to contribute to the BDS national scheme to update our knowledge on the status and distribution of this species.

During the spring a good sprinkling of Hairy Dragonfly were seen at various locations and Variable Damselfly had a good showing, particularly at Little Paxton reserve, where an estimated count of 10,000 was noted on 12 June. The well-established Norfolk Hawker colony here revealed lower adult numbers in 2018, but many exuviae were counted (up to 50 per day on some occasions) signifying that the breeding population is still healthy. Singleton Norfolk Hawker records were also made at new sites including the nearby Huntingdon racecourse, Fen Drayton RSPB reserve and Godmanchester Common. It is likely that these could represent dispersive dragonflies from the Little Paxton site.

At Quy Water, a small stretch of flooded coprolite pit east of Cambridge, around 300 Azure Damselflies were reported. In July a lone Southern Migrant Hawker was also present here

for about a fortnight. White-legged Damselfly records came from Shepreth and other sites, and one recorder made a point of recording the species over the whole 2018 season at a series of lakes at Cambourne. Downy Emerald continues to persist in small numbers at its only known (and private) county site south of the city.

Willow Emerald Damselfly has turned up at a number of new sites throughout the county, as predicted, including an impressive total of over 200 at Quy Water, and the species was recorded at this site until at least mid-November.

### Bedfordshire - VC30

*Rory Morrisey*

It was a year of consolidation for the species new to Bedfordshire, plus we had possible additional colonists and at least one vagrant. Willow Emerald Damselfly appears to be well established at Duck End NR, and the species has turned up at several new sites across the county including Lousy Bush LNR, Wrest Park, King's Wood NNR and Sandhouse Lane LNR (Heath and Reach).

The first sighting of note was a Norfolk Hawker at Octagon Farm, Willington at the end of May. A female Norfolk Hawker then turned up at Felmersham NR on 14 July. For the second year running a single Beautiful Demoiselle sighting has been seen at Cranfield; however, it is likely these individuals were just passing through. Keeled Skimmer was again seen at Sundon Quarry and Variable Damselfly was seen again at Felmersham NR suggesting these species may be breeding there. Felmersham NR has proven to be probably the best site in the county for Odonata. Downy Emerald was seen there for the first time in June, a long way from its usual sites in the south-west of the county. Several Scarce Chasers were sighted too, having spread from the East. Adult Scarce Chasers were recorded in

### A Southern Migrant Hawker made a rare appearance in Cambridgeshire during July 2018





copulation and ovipositing, while exuviae were also found. Right at the end of the season Willow Emerald oviposition scars were also found at Felmersham, but no adults were seen.

A single male Southern Migrant Hawker was found patrolling the dried-up pond at Sandhouse Lane NR and stayed from 23 to 25 July. It was often chased off by the larger hawkers, but kept re-appearing. No female was seen. One wonders what the consequences has been of many smaller ponds in the county drying out over the summer of 2018.

### Northamptonshire – VC 32

*Mark Tyrrell*

We had a great year in Northamptonshire, with the highest number of species ever recorded (27), despite a cold and wet start to the spring. The first bit of excitement came in early May with the discovery of a new Variable Damselfly colony in a country park near Corby. This site is some distance from other known colonies and it is very atypical habitat for this species so how and when they got there is a mystery (although the site at Maxey is also atypical). By mid-May, things were moving well, and I found 72 Downy Emerald exuviae around a single pond at Yardley Chase. This pond was cleared a few years ago and has improved dramatically for this species as a result. Our field trip here in mid-June was very popular and a great success and several attendees saw Downy Emeralds for the first. The biggest surprise was the arrival of a male Lesser Emperor at Stanwick Lakes on 4 August.

Willow Emerald Damselflies also had a good year, although at one point it could have ended in disaster. Three further sites were discovered in addition to its regular strong hold at Finedon. At two of these, egg scars were located, and at Fermyn Woods Country Park, these were the only sign of this species. At Barnwell

Country Park both adults and egg scars were found and at Priors Hall only a single female was sighted. At Finedon, Froglife put up signs requesting volunteers to clear the pond, luckily I saw them well in advance and I made contact to ensure that the willow trees were protected. I met up with them and gave a Willow Emerald training session, pointing out the scars and adults hidden in the trees. Froglife made further contact to double check confirmation of egg scars at another site in Cambridgeshire, which I reported to Val and turned out to be a new site.

To finish the year, we had our first December Common Darter, a male photographed on 9 December near Corby.

### Gloucestershire – VC 33 & 34

*Ingrid Twissell*

The 2018 was an exciting year with alien species emerging from a tropical fish-tank in January and February: Marsh Bluetail and Oriental Scarlet Darter.

The highlights of 2018 include a male Southern Migrant Hawker that was seen at The Barn Owl Centre, Gloucester, on 22 July, a first for county, and a male Lesser Emperor that was spotted on the same day at WWT Slimbridge. Keeled Skimmer, a rarely seen dragonfly, was recorded at Bilson Green, Forest of Dean (FoD), with a single male on 3 July, and two males clashing wings on 7 July. Could this be the forests first breeding site?

In May, a new site (The Barn Owl Centre) for Hairy Dragonfly was identified, and there were also records from Slimbridge, Walmore Common and Frampton-on-Severn and Orchard Pools in South Gloucestershire. Also, at Walmore Common, Golden-ringed Dragonfly was again recorded in June, a more northerly location than its usual sites in the FoD.

Clubtail Count 2018 generated records along the River Severn,

from its present stronghold at Apperley from 14 May until 9 June, as well as The Mythe and Lower Lode, Tewkesbury. It was also present along the River Wye, in the Symonds Yat area, in May and June, and two new locations were discovered at RSPB reserves at Highnam, Gloucester, and Nagshead, FoD, in June.

Scarce Chaser was recorded from May until July on the River Avon from Welford-on-Avon to Twynning (with a single male photographed outside a supermarket in Tewkesbury in late May), and on the River Severn in The Mythe and Slimbridge, Frampton-on-Severn and Saul areas. In June, the first sighting of a male was at Bredon Hill, and a new breeding population was discovered at Pitville Park, Cheltenham. A mated male was recorded at Coombe Hill Canal

### Emerging Scarce Blue-tailed Damselfly



©Dick Eastwood

NR, as well as a female. These were the first sightings for the site since 2013 although it is not known whether they are breeding or if these individuals travelled from the River Severn.

Downy Emerald was recorded at several locations in the FoD, and at Cherington Lakes, Stroud, three males were recorded, the first sightings there since 1982.

Black Darter was again recorded at The Park, FoD, in August with a maximum count of four males and one female ovipositing into moss. This species seems to be only sporadically recorded in the FoD.

Ruddy Darter has had a good year with more sightings than usual spread over the county, 50+ at Coombe Hill Canal/Meadows NR in late June and a sighting at Churchdown on 13 October.

White-legged Damselfly was seen at the following River Severn sites: The Mythe in May and June, Apperley from 28 May to 20 July, Lower Lode from 29 May to 20 July, and Deerhurst in June. It was also seen on the River Avon (Twynning) in June, River Wye (Symond's Yat) in June, Nagshead RSPB reserve on 30 Jun, Forthampton Court on 1 July, Dowdeswell Reservoir (Cheltenham) on 5 July,

Stroudwater Canal (Ebley) on 10 July, Gloucester/Sharpness Canal in June and August, and Welford-on-Avon on 1 August.

A new Small Red-eyed Damselfly breeding colony was discovered at Lightmoor Ponds, FoD, on 5 July with 50+ counted, including 21 tandem/ovipositing pairs. The Mythe population (the first known Gloucestershire breeding colony) had 50+ ovipositing pairs on 18 August. Other records were from Speech House Lake (FoD), Nagshead NR, Coombe Hill Canal/Meadows, and Honeybourne. Emerald Damselfly was spotted at two unusual sites: Pitville Park, Cheltenham, in July and Dundry Nurseries, Cheltenham, in August.

### Monmouthshire – VC 35

Steve Preddy

This is my first report for Darter since taking on the role of Monmouthshire County Dragonfly Recorder in summer 2018. I cover Monmouthshire vice-county, which is a little larger than the former Gwent, and significantly bigger than the modern Monmouthshire local authority area. It covers the levels habitat from the east edge of Cardiff through to Chepstow, the city of Newport, the western valleys and mountains north to the southern

parts of the Brecon Beacons National Park, and the agricultural landscapes east to the Wye Valley; a very varied county, with a diverse range of species.

The most notable sighting of the year was our second Lesser Emperor, at Ynys y Fro reservoirs, found by Darryl Spittle. Small Red-eyed Damselfly continues to colonise the county, with records from several new sites in the southern coastal strip. Common Clubtail was well-recorded at its reliable and accessible sites on the Wye around Monmouth.

I have spent the winter processing the backlog of 1300 records in iRecord and this is almost complete. Thank you to everyone who has contributed these over the years. If you are an active dragonfly recorder in this part of the world it would be great to hear from you so please do get in touch. My contact details can be found at the back of this magazine.

### Worcestershire – VC 37

Mike Averill

Although it had been a slow start to the season for early species, reasonable weather in May and the hot dry June brought other species forward and some like the Emerald Damselfly, and Ruddy Darter had their earliest emergence date for many years. Two late season species, the Small Red-eyed Damselfly and Migrant Hawker, were also early.

One way to get a feel for how dragonfly numbers fared is to look at transect data from our River Avon monitoring surveys. Here we see that the Scarce Chaser had the best year for the last ten years and males were particularly evident, which may be due to the fact that its flight period exactly coincided with the hot spell. It was also the best year for ten years for Large Red Damselflies and Brown Hawkers. Banded Demoiselle, Red-eyed Damselfly and Blue-tailed Damselfly had a reasonable year but the Common Blue-Damselfly

### Multiple Ruddy Darter sightings were reported in Breconshire in 2018



©Keith Noble



was conspicuously absent this year. White-legged Damselfly is a subject of concern by the British Dragonfly Society. This species does fluctuate from year to year and had a good year in 2011 and 2017, but it was noticeably absent this year despite the good weather; the reason for this is not clear.

Long running counts for the Common Clubtail Dragonfly on the Severn show that emergence totals were the third highest in the last eight years and searches elsewhere have shown that while the River Severn and lower Teme appear to be holding their own there is some evidence that they are harder to find in the upper reaches of the Worcestershire Teme. On the River Avon there was just one record of an adult this year at Eckington making 2018 the eighth year without any significant records.

The Common Hawker is never common in the county but there was one record this year. A periodic visitor, the Red-veined Darter, also made one appearance. Away from its stronghold on the River Avon, the Scarce Chaser also had a good year turning up at Hillditch pool where, despite looking as if the last two years would be the

colony's last, 7 males were seen at their peak. There was also an individual at another pool near Kidderminster, and in the south of the county there were several at gravel pits and also at Croome Park.

A drought year it might have been but how nice it was to be able to go out knowing there would be no need for raincoats, and the barbeque weather meant there was even a bit of evening flying by some of the Hawkers, something you rarely see in the UK.

### Staffordshire – VC 39

Dave Jackson

Of note a male Hairy Dragonfly was reported along the Anglesey Branch canal near Hammerwich on 6th June, and Belvide Reservoir was again graced by a male Lesser Emperor on 25 June, as was Forge Mill Pool, Sandwell Valley RSPB reserve in mid-July.

Black Darters still perform at Womere on Cannock Chase Banded Demoiselles were again sighted at Wom brook in Wombourne, and the colony of Keeled Skimmers remain in

residence at their mid-County site.

I recorded a Southern Hawker at Belvide Reservoir on 6 November.

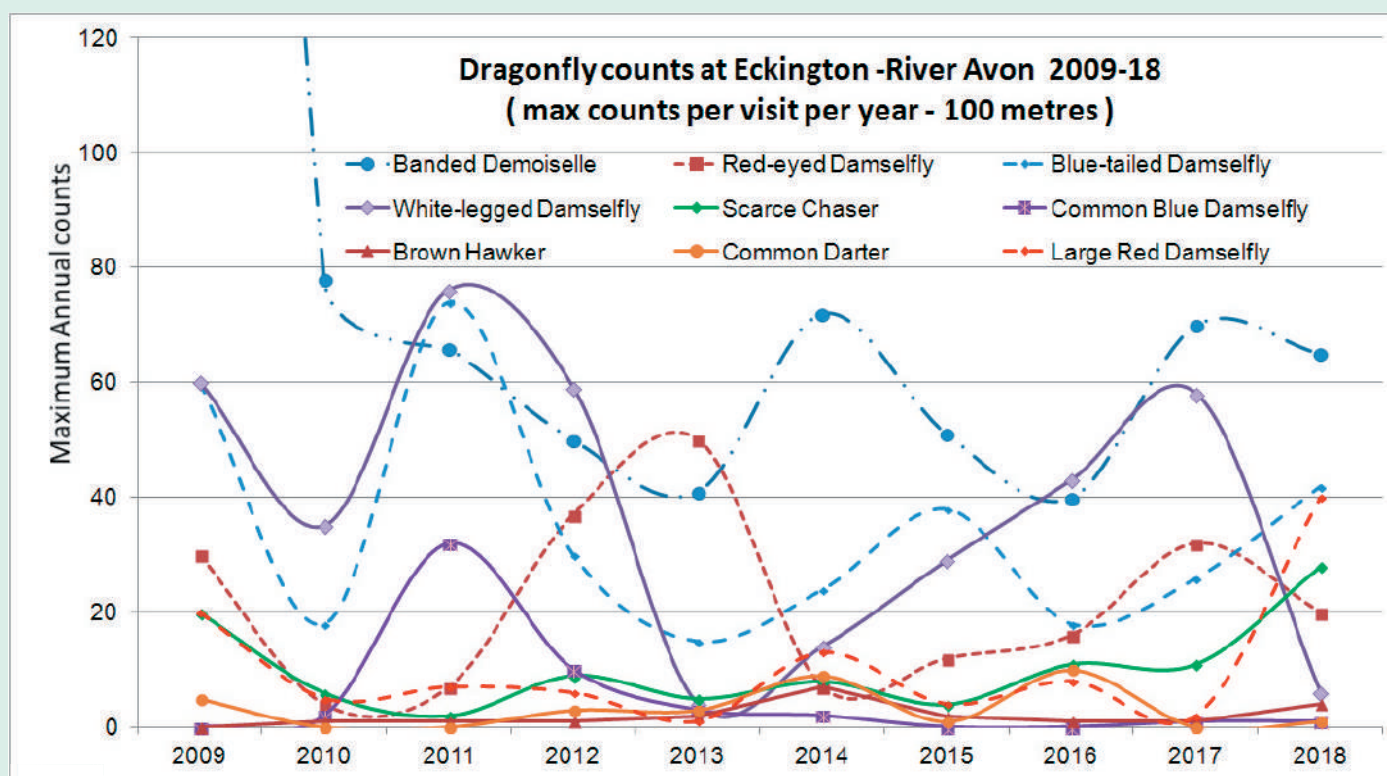
### Shropshire – VC 40

Vicky Nall

A slightly later start to the year compared to 2017 after a VERY long winter! Large Red Damselfly was the first species on the wing on 21 April at Whixall Moss. Things started to hot up pretty quickly after this and by 4 May we had both Four-spotted Chaser and White-Faced Darter at Whixall Moss, and by the second May bank holiday we had early records of Emperor and Common Darter.

The summer of 2018 saw a total of 25 species recorded, 15 Dragonflies and 10 Damselflies, with a notable lack of Scarce Blue-tailed Damselfly, for the second year in a row, and of Downy Emerald. Our last recording was of Common Darter on 13 November.

The star of 2018 in Shropshire was the Keeled Skimmer which was found at two new sites' Wildmoor Pool (17 July 17) and Titterstone Clee Hill (26 July), and



a confirmed reappearance (the first since 2013) at Whixall Moss on 17 July.

We also had the first record of Red Eyed Damselfly at Whixall Moss since 1986. The individual probably drifted over from the nearby canal but an interesting sighting all the same.

Thanks to Sue Rees Evans, the Shropshire Dragonflies Website continues to keep recorders in touch with the comings and goings of our Odonata via the flight season blog, which definitely worth a look each year from April onwards! [www.shropshiredragonflies.co.uk](http://www.shropshiredragonflies.co.uk)

Finally, a huge THANK YOU to all who have sent in records this year. I am excited to be the new CDR for Shropshire and I love that you keep filling my inbox with glorious photo and records- a nice change from the usual email drudgery! I hope to see you dragon hunting in 2018!

## Breconshire - VC 42

*Keith Noble*

The first sighting of 2018 was early, a Large Red Damselfly at Ystradfawr on 14 April, and many more of this species emerged over the warm Bank Holiday weekend (6 to 8 May). The first of the blue damselfly sightings were 50 Azure Damselflies at Sarnau on 12 May, soon followed by thousands of Common Blue and Variable at Llangorse Lake.

In 2017 a single male Red-eyed Damselfly was seen at Llangorse Lake, the only county record since sightings at Sarnau in 2011. In 2018 8 lone males and a pair were sighted on lily pads by the Llangasty car park on 23 May, then about a dozen were recorded at the same location on 31, and some were still present on 16 June. In addition, up to 6 Hairy Dragonflies were in the Llangasty fields from the second half of May.

Many more of our regular species such as Broad-bodied and Four-spotted Chasers, Keeled Skimmer, Emperor and Golden-ringed Dragonfly, as well as Banded and

Beautiful Demoiselles, appeared in June and July. There was also the surprise of a Ruddy Darter, photographed by the Calais stream on Mynydd Illtyd on 5 July, and seen repeatedly until 24 July. This second Ruddy Darter record for Breconshire record was soon followed by a third at Llangorse on 4 August, the site of the first record back in 1999.

Brown Hawkers bred well at Sarnau pools, the only regular site for this species in the county, and one was seen patrolling the Llynfi stream at Llangorse in August.

By September the variety of species observed on the wing shrunk to: Southern and Migrant Hawkers (a total of 70 recorded at Llangorse on 2 September), Common and Black Darters, as well as Common Blue and Emerald Damselflies. These species remained until at least mid-October.

## Radnorshire - VC 43

*Bob Dennison*

The 2018 recording effort resulted in 523 records from 25 contributors, as well as a few additional Common Clubtail and White-legged Damselfly records captured along the River Wye during the BDS Clubtail Count Project surveys. The first sighting was the emergence of a Large Red Damselfly at Dick Eastwood's bog-meadow pond near Hay-on-Wye on 2nd May and the last was a male Southern Hawker nearby at Stephen Mullard's pond on 11 November.

No new species were added to Radnorshire's 'regularly recorded' list of 14 dragonfly and 8 damselfly species. However, thanks to Jane Jarvis and Silvia Cojocar, two new locations for Keeled Skimmer were identified in the north and west of Radnorshire.

At a new location in South Radnorshire, Dick Eastwood witnessed the emergence of dozens of Scarce Blue-tailed Damselflies, a species that is not always recorded every season.

## Migrant Hawker



©Stephen Mullard



This discovery, on Dick's part, was exceptional, as it is the first proof of breeding for this species in Radnorshire, and in good numbers and at a new location!

Although there were no sightings of any new Odonata species in Radnorshire during 2018, there are indications that a few species, including Ruddy Darter and Migrant Hawker (which are known to be mobile and naturally dispersive in behaviour), may be becoming more established in the south and east of the Vice County. Based on the regularity of sightings of these two species, year on year, at certain sites in the south and east of VC43, supplemented by occasional but strengthening evidence of breeding, my prediction would be that we'll be seeing more of these two species in Radnorshire over the coming seasons.

### Lincolnshire – VC 53 & 54

*Nick Tribe*

Species that are expanding their range nationally have again been on the move in Lincolnshire. A female White-legged Damselfly was photographed by Kerry Harrison on the River Glen at Thurlby Fen Slupe NR on 13 July, 10km north of the known breeding area on the River Welland at Stamford. Willow Emerald Damselfly was recorded at Kirkby on Bain Gravel Pits from 17 August (by Jodie Mellowship et al). This represents a move of 4km north from the previous most northerly site at Gibraltar Point National Nature Reserve. This species was recorded again from Gibraltar Point and Baston Fen SSSI. Searches for this species further north near Lincoln were not successful but if the species is in the Bain valley, it has surely spread up the Witham valley.

A Norfolk Hawker was seen at Baston Fen by Neil Crossman on 19 July. This is the second year running this species has been recorded in Lincolnshire. A Lesser Emperor was seen at Whisby Nature Reserve near

Lincoln on 14 July (by Grahame Hopwood).

A Red-veined Darter was seen at Gibraltar Point on 22 June by Ben Ward, a reliable location for this species.

A Small Red-eyed Damselfly was seen at Water's Edge CP in Barton on Humber on 11 August (by Andrew Ashworth), the second record of this species for this site.

Wanderers from natal areas included Common Hawker at Far Ings on the south bank of the Humber Estuary on 27 June (spotted by Chris and Pat Hogarth) and at Messingham Sand Quarry on the 30 June (recorded Steve Routledge). A Black Darter at Lea on the River Trent on 7 August also might have been locally-bred.

### Leicestershire & Rutland – VC 55

*Ian Merrill*

The exceptionally warm and dry weather of 2018 will no doubt live long in the memories of us all, and surely contributed to one of the best ever recording seasons for scarce resident dragonfly species in VC55. One of our two most recent colonists, the Beautiful Demoiselle, was again recorded on the River Avon and for the first time on the River Swift, though in small numbers and at just a handful of locations. In contrast, our other new arrival, the Scarce Chaser, really made its presence felt in 2018. Up to five were counted on the lower reaches of the River Welland, close to the Lincolnshire border, where only singles had been seen previously. The real population boom, however, was apparent on the northernmost reaches of the River Soar. After being first detected here in 2016, and following a blank year in 2017 (no doubt linked to the two-year life cycle of this species), Scarce Chaser was located in three one-kilometre grid squares, with double figure counts being made in both June and July.

In the coming season I would once again urge recorders to scour the upper reaches of the Rivers Welland, Avon and Swift for Beautiful Demoiselles, and the slow-flowing stretches of the Rivers Welland and Soar for Scarce Chasers, as we strive to map the spreading distribution of these striking insects.

Hairy Dragonfly experienced a prolific year, with numerous records from previously unpopulated localities, and several more Small Red-eyed Damselfly populations were also discovered. I cannot conclude this annual summary without specific mention of Matthew Billing who recorded all 23 of VC55's breeding species and amassed an incredible 1,600 individual records along the way. This fact alone would be astounding, but then you must consider that the whole feat was achieved by bicycle; beat that!

### Cheshire – VC 58

*Chris Meredith*

As I'm sure was found in most counties, after cold weather in April the season got started very quickly in May with weeks of warm weather and sunshine, meaning spring emergence was largely unhindered with many typically later species emerging early. Of the 25 species seen throughout the season, 15 were first recorded in May, including some early appearances from Southern Hawkers and Emerald Damselflies. The last record of the year was a Common Darter seen in Delamere Forest on 18 November, with Migrant Hawkers also recorded in November. The last damselflies of the year, Common Blue Damselflies, were recorded on 10 October at Tatton Park.

We had all of the usual suspects show up throughout the season, but some more unusual records for VC58 came in the form of White-legged Damselfly moving up the Llangollen Canal into Cheshire, and a Keeled Skimmer spotted on the Wirral. The most

exciting records of all however were those of Scarce Blue-tailed Damselflies, a new species for the county recorded at a site in eastern Cheshire. Good numbers were observed and signs of possible breeding seen. Time will tell if the small population persists. Hairy Dragonfly were recorded at only two sites and Downy Emerald were recorded at their regular haunt near Delamere Forest.

### South-east Yorkshire – VC61

*Martin Roberts*

The season started late, with Large Red Damselfly not reported until 5th May, but in the following week five other species of Damselfly and two species of Dragonfly (Four-spotted Chaser and Broad-bodied Chaser) were reported from North Cave Wetlands, all by the same keen-eyed Recorder.

Following an anecdotal report of Hairy Dragonfly on the Pocklington Canal in 2017, I was able to confirm its presence at this new location this year. This is not a particularly common species in the vice-county so its presence here is very welcome.

The highlight of the year for a few lucky observers was the appearance of at least three male Southern Migrant Hawkers at Spurn and Flamborough Bird Observatories in late July. Given the location, these individuals could have arrived across the North Sea or could have been part of the UK dispersion seen this year. In October, a single Vagrant Emperor was also reported from Spurn.

Our hopes of finding home-bred Red-veined Darter this year, following the many sightings near Goole at the end of last season, came to nought unfortunately, though several individuals were seen at Spurn as usual.

A project to monitor Odonata for the Yorkshire Wildlife Trust at newly restored dew ponds in the Wolds was not as productive as hoped, as many of the ponds virtually disappeared during the hot, dry summer. However, small numbers of the expected common species were seen and we will repeat the survey on several additional restored ponds next year.

In total, over 1100 records were received, the greatest number for VC61 since BDS adopted iRecord

as its main recording tool. Many thanks to all those who sent in records of sightings.

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

*Keith Gittens*

Many thanks to all recorders and volunteers who contributed this year.

The long winter resulted in a late start to the 2018 season, the first record on 3 May for Large Red Damselfly, over three weeks later than 2017. Good weather developed from then on, resulting in an excellent summer for Dragonflies. During a visit to the fish ponds near Ampleforth on 22 July over 20 Brown Hawker were recorded, and ovipositing females were everywhere. The strong 2018 breeding seasons should result in good numbers of emerging adults, for many species, in the next two to three years.

I continue my plea for records for the northern part of the Yorkshire Dales National Park. In addition, records for *Erythromma* species remain restricted to one site near Scarborough and three near York. Please keep a look out for Red-eyed Damselflies at any site you visit.

A Bioblitz at Nosterfield NR near Ripon in July was successful, producing over 50 dragonfly records for this excellent site. Work goes on at Worlds End, Strensall Common, near York to remove encroaching Birch and Scots Pine from the heathland and around the pools. BDS and Yorkshire Dragonfly Group (YDG) members have been able to assist at work days organised jointly by Fresh Water Habitats Trust (FWT) and Butterfly Conservation (BC). The Forestry Commission and the tenant farmer have also assisted with scrub control, truly a team effort.

### Volunteers carrying out scrub control



©Keith Gittens

### South-west Yorkshire – VC 63

*Alistair McLean*



The dry summer weather inevitably had an effect on water levels, with some ponds completely drying up. Time will tell whether nymphs were able to survive the drought in these areas. On the plus side, the fine weather resulted in plenty of days with high Odonata activity.

Perhaps the star of the show 'on my patch' this year has been the Small Red-eyed Damselfly. Although this species has previously been recorded in the Sheffield area, its presence has been sporadic; here one year, gone the next. For the last few years, it appears to have become more established, particularly at Harthill Reservoir and Treeton Dyke. Interestingly, it appears to be following the colonisation pattern of its close relative, the Red-eyed Damselfly, which became established in the same areas around 8 years ago. The only site in Sheffield where Red-eyed Damselfly has been recorded and Small Red-eyed Damselfly has not, is the Sheffield & Tinsley Canal. I suspect that this river system will be one to keep an eye on over the next few years.

There is growing evidence for a small population of Golden-ringed Dragonfly in the area around Agden, with several sightings over the last few years. This area is some distance North of the Derbyshire riverlets which are the main haunts of this species. Prior to these recent occurrences, the species was last recorded in this area in 1999.

In the next season, I would be keen to receive records from the area South and West of Huddersfield, as I don't have much recent data for this locality, but as ever, I am grateful to receive data from anywhere in the Vice County. Thank you to everyone who reported your sightings this year.

#### Mid-west Yorkshire – VC 64

*Simon Joseph*

In 2018 352 records for 19 species were submitted by 47 people, a similar figure to previous years

(570 in 2017, 212 in 2016, and 174 in 2015). The flying season began on 19 May (with sightings of Large Red Damselflies) and closed on 22 October (with a Common Darter record).

There were some concerns with ponds drying out at Timble Ings and Grindleton Fell, although the number of species recorded at these sites did not change.

Last year's Beautiful Demoiselle sighting was not repeated and there were no records of Small Red-eyed Damselflies this year, although last year's records were all by one person who was measuring their range.

Askham bog was in the news following a planning application for 500 houses next to the bog, which could threaten water levels. We supplied a species list to naturalists challenging the application.

The advantage of the dry weather was that it made some sites easier to explore, and I found a small pond in a normally inaccessible area of Grindleton Fell which was very popular with Common Hawkers.

Golden-ringed Dragonflies are still doing very well at Cross of Greet, and still present at Timble. The high point of the year was having a stall next to the pond at Bradford's Denso Marston Nature Reserve celebration day in June. A group of fascinated children got to witness the maiden flight of a Southern Hawker! Birdwatchers at St Aidan's RSPB site worked hard again this year to provide comprehensive dragonfly records and submitted 158 of the 352 records. Unlike last year no Red-veined Darters were seen. Working with such groups seems to be very productive so this year I made contacts with Gisburn Forest Hub and Wharfedale Naturalists, and plan to contact birdwatching groups in 2019.

#### Westmorland and Cumberland – VC 69 and 70

*David Clarke*

The long, dry and often very hot period of spring/summer 2018 surprisingly brought no migrant species, though it did produce some interesting occurrences of certain species in the northern half of the county, especially in June.

#### The Yorkshire Dragonfly Group stall wowed visitors to the Denso Marston Reserve 2018 celebration day



©Simon Joseph

5-10 June seems to have been particularly notable for a concentration of 'extra-limital' sightings of both Demoiselle species. A number of records relate to the RSPB Haweswater Reserve, and no doubt reflect the regular presence of observers there. There were sightings of both species in Swindale (NY51) where neither has previously been recorded. As there are no obvious sources of this species to the north of these valleys, it seems likely that these individuals came over a watershed, flying up south-running valleys such as Kentmere and Longsleddale. Whether the presence of both sexes will have founded a new population remains to be seen.

A male Banded Demoiselle also appeared in Swindale, on 10 June. Here the source could well be from a northerly direction, since the species has been recorded well upstream on the Eden, and Eamont. This year one or two appeared on the Lowther at Askham (NY52), which receives the Swindale Beck; the date was again in early June. In Borrowdale, a Banded Demoiselle was seen on 24 June at Grange (NY21), presumably having negotiated the full length of Derwentwater from the usual upper limit at Keswick, 5 km away. A much more remote sighting was of a male photographed on the upper Irthing near Butterburn Flow (NY67) on 30 July, some 30 km by river-distance from the nearest known site. 40-60 Banded Demoiselles on the Eden just above Lazonby (NY53) on 28 June either represent a previously undiscovered colony or an accumulation of upstream-moving individuals, or both.

Keeled Skimmers also appear to have done well despite the negative impacts of the hot weather on the shallow runnels and mires they inhabit. A strong population was noted on flushes above Mungrisedale village (NY33), and the species was present at a mire well up the nearby Mosedale valley. Other sites include Harrop Tarn (NY31) and Cotra mires, Dunmail Raise

(NY31). These appear to be new records for these parts of the county. The mire at 320 metres in the Naddle valley, Haweswater (NY51) produced a first record later in the season (26 July).

Sightings of the north-advancing species, the Broad-bodied Chaser and the Black-tailed Skimmer, were to be expected, and the former in particular produced a wide scatter of records, some well out of typical habitat and in various states of maturity. Locations included a mid-eastern 'cluster', broadly aligned with the Eden valley, within a 15 km radius of Penrith: Swindale, Bampton Common, Ousby, Wan Fell, Kirkoswald and Eycott Hill. Sighting dates ranged from 26 May to 8 July. Black-tailed Skimmers featured less than might have been predicted and records in the north of the county were few. Soddy Gap (NY03) near Cockermouth (the site of some previous records), had one in mid-July.

The warm early season weather coincided perfectly with the emergence and flight period of White-faced Darter, particularly at its re-introduction site, Foulshaw Moss. This resulted in a record count (2000+ exuviae) at Foulshaw, where the species showed well after having started its emergence in early May. Remarkably, after two nil-return seasons, a single male was seen at Brown Stone Moss on Claife Heights, Windermere (SD39) on 5th June. The possibility that a

breeding colony of this species persists in that area, against all odds, still cannot be discounted.

### Isle of Man – VC 71

*Pete Hadfield*

A relatively exciting year for the Isle of Man (we only have 10 resident species here). Despite our standard late start, the hot weather in June gave us some surprises.

A count of 7 Four-spotted Chasers at Stoney Mountain was the highest recorded count since a record from Ballacain Dubhs in 1941 which quotes "Very many, at least a score."

A single Emperor Dragonfly was also recorded at Stoney Mountain, which is a new site for them. The last record of Emperor on the Isle of Man mainland was a breeding pair in 2011, 20 miles away.

Most exciting of all was confirmation of Azure Damselfly as a resident species on the island for the first time. A request for people to look out for this species on a newly created facebook group, was met with photographic proof of Azure Damselflies occurring at Pooyl Dooley pond in 2014 and 2015. Unfortunately, despite several visits to the pond this year none were recorded.

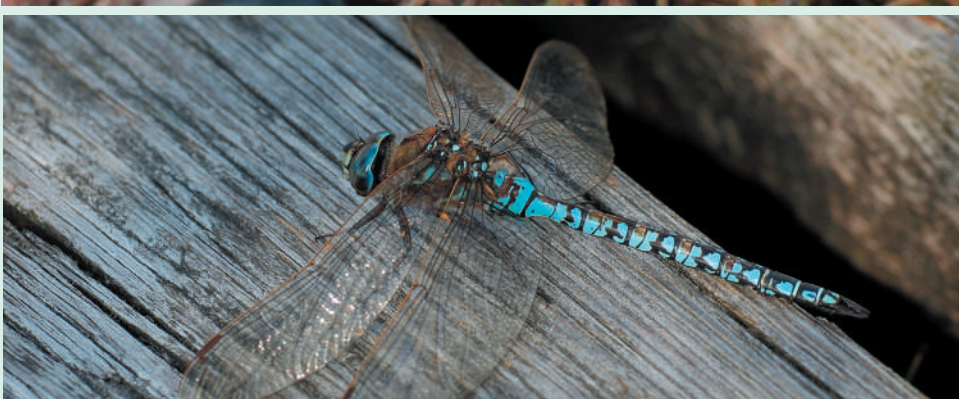
Next for us to find is Golden-Ringed Dragonfly. If they are in Orkney then surely they are here too!

### White-faced Darter had a good year at Foulshaw Moss



©David Clarke





# Scottish Updates



# Highlights from Scotland

Pat Batty, Scotland Dragonfly Recorder

The most exciting news and sightings from Scotland.

The warm sunny weather led to more sightings of usually more elusive rare species, as well as the early emergence of many common species. **Large Red Damselfly** was first recorded on 29 April. **Common Hawker** was photographed emerging on 11 June in the North-west, and an exuvia found on 6 June. This early flight time meant that the **Common Hawker** was flying at the same time as **Azure Hawker**. Unfortunately there were many reports of pools drying up throughout the country, and bog pool species were probably most negatively affected.

Many species were recorded in new areas during 2018. **Keeled Skimmer** and **Beautiful Demoiselle** were seen at new sites in Argyll, Lochaber, Ardnamurchan, and on the Isles of Mull and Jura. Males of the latter species were prospecting along the Crinan Canal. 130 **Keeled Skimmer** were seen at Knockman Wood in Dumfries and Galloway, and the species was seen at several sites on Jura.

The **Hairy Dragonfly** was also breeding at new sites in Argyll, Dumfries and Galloway and was recorded in new hectads (10km x 10 km map squares) in these areas. Males were observed patrolling in new

Hairy Dragonfly



©Mark Robinson



areas and one was even seen investigating the pool created behind a beaver dam.

**Northern Emerald** was also seen in the West on Skye, Mull, Loch Arkaig, Knoydart, Ariundle and Glen Etive, and West of Inverness, expanding its range. New breeding sites were found in Glen Garry and Glen Orchy where a female was seen egg laying above the Allt Broighleachan pinewoods. Overall, the good weather led to a higher number of sightings.

There were fewer records for **Northern Damselfly** this year, and most were at known sites. However, larvae were found at an outlying site, the Wood of Achnatone, confirming breeding here.

**Azure Hawker** was seen in several new areas, seven new hectads, and was refound in two hectads with pre 1990 sightings. The good weather resulted in more sighting of adults, with more activity seen around pools in the Loch Maree area. A large new breeding area was found in the hills of Glen Garry, with over a hundred larvae seen, although only one was mature enough to emerge in 2018. New breeding sites were also found on the hills between Glen Affric and Inverness, all upland sites between 300 and 500 metres above sea level. Many of the hill pools dried out this year which could affect the survival of larvae, which take 3-4 years to develop. This species was not seen in Galloway at Silver Flowes despite intensive survey work in 2017 and 2018. No larvae were found in pools at Forsinard in Sutherland where breeding was found in the 1990s. Much more survey work is needed for this species as it seems to be more widespread on the hills than was originally thought. However, it must be remembered that a large area is needed to sustain a viable breeding population.

**White-faced Darter** was first observed emerging on 23 May and was seen at new sites, hectads in Glen Garry and West of Loch Ness, and a new breeding hectad in Inverness. Larvae were found at the Wood of Achnatone. Females were recorded ovipositing at Dava north of Grantown; the species was seen in four new hectads in this area, extending the Speyside range northwards.

Thanks to the efforts of Larry Templeton, another 18 new sites were found for the **Brilliant Emerald**, including four new hectads, and he saw the species in 28 lochans in 2018. He has been exploring many sites to the west of Loch Ness linking the Affric and



Loch Bran populations. There was also two new sites found in Argyll.

**Variable Damselfly** was recorded at new sites and hectads near Castle Douglas, and in Kircudbrightshire and Ayrshire.

**Banded Demoiselle** was recorded ovipositing at Woodhall Dean near Edinburgh, and at Ayton on the River Eye. There were also breeding records from Dumfries and Galloway.

**Emperor Dragonfly** was recorded in Scotland for the first time since 2015. A female was seen ovipositing at Aberlady on 28 June, the first breeding record for the Lothians. Ovipositing was recorded again on six occasions at Newmains farm, the original site.

**Southern Hawker** is continuing its spread across Scotland and was seen on Deeside, Speyside, Mull and in the North-west near Dunrobin Castle, with records received from the Borders to East Sutherland.

**Migrant Hawker** was recorded at Garnock in Ayrshire (apparently this site has been known for several years) and also near Colvend. In the Borders it was seen at Whinny and Mire lochs, and at Reston.

In Scotland we are continuing to work with the Forestry Commission at their sites and giving training to staff. 2018 highlights from the partnership include re-finding species (some of which that had not been recorded for 10 years or more), as well as finding Northern Emerald and **White-faced Darter** at new sites, in some cases where bog restoration work had been completed. We have also been working with other conservation bodies, such as the RSPB, Scottish Wildlife Trust and the National Trust for Scotland.

Thank you to Butterfly Conservation for passing on their dragonfly records and, lastly, many thanks to the large number of recorders who have submitted over five thousand records (over a thousand days of recording), and to Colin Hall who is now co-ordinating vice counties 95 and 96 (Moray and East Inverness-shire).

### Variable Damselflies



©Rory Morrissey



# Dragonflies of Dumfries and Galloway a 2018 review

Barbara Mearns

Twenty-one species of Dragonflies and Damselflies have been recorded in Dumfries and Galloway, an area which encompasses the Watsonian vice-counties of Wigtownshire, Kirkcudbrightshire and Dumfriesshire. The distribution of several breeding species has changed considerably since the publication of the last national Atlas in 2014.

Ten species remain common and widespread across the region in suitable habitat: Emerald Damselfly, Large Red Damselfly, Azure Damselfly, Common Blue Damselfly, Blue-tailed Damselfly, Common Hawker, Golden-ringed Dragonfly, Four-spotted Chaser, Common Darter and Black Darter.

Eight have a more localised distribution, of which the most frequently encountered is **Variable Damselfly**, though it is absent from most of Scotland. **Variable and Azure Damselfly** can be compared in the field at a few spots where they co-exist, including Loch Fern, near Dalbeattie and Castle Loch, Lochmaben (near the Valison Burn).

By 2006, **Hairy Dragonfly** was known at just four sites, all within 2 km of the Kirkcudbrightshire coast: Carrick Ponds near Borgue, Colvend Lochs, Killiegowan Wood, and Palnackie Loch (where Bob Merritt found 5 larvae in 2018). Due to increased observer effort, it has now been recorded in 19 tetrads in 9 hectads. Two new sites were found in 2018 on the Machars of Wigtownshire: at Elrig Loch and Loch Chesney.

**Keeled Skimmer** was added to our breeding Odonata list in 2007 when adults and larvae were found at runnels in Cumloden Deer Parks near Newton Stewart. In 2018, Iain Leach found that it had extended its range there, and counted over 100 adults, mostly males. It is now known from several other sites.

**Banded Demoiselle** was first found in 2004 on the Kirkgunzeon Lane (a slow-flowing river) near Dalbeattie. On a summer day, males can often be seen displaying below the bridge on the B793, just East of the town. There are also a few records from similar rivers near the English border.

We have four hawkier species. **Common Hawker** can be seen at countless lochs and ponds from just above sea level (for example, at Kirkconnell Flow and the Almorness peninsula) to 710m (in the Moffat and Galloway Hills).

**Azure Hawker** is an arctic-boreal species on the



southern edge of its British range in Galloway Forest Park. In the 1990s it was easy to find adults and larvae on the Silver Flowe NNR, but by 2007, experienced odonatists were failing to find any larvae in the network of shallow bog pools. Jonathan Willett spent eight days searching for larvae over eight years, without success until 30 May 2016 when he found one. This last season, Bob Merritt visited on six sunny days in May and June, twice accompanied by David Clarke and twice by Richard Mearns and myself, but had no success. With the changing climate, Azure Hawkies seem to be barely hanging on. It has been suggested that there may be some overlooked sites elsewhere, but Richard and I have searched fruitlessly. There were occasional flight records from Cairnsmore of Fleet NNR in the 1970s and 80s, and on contract with SNH, Richard and I guddled the shallow pools below the Spout of the Clints in June and July 2007, but just found eight other species. I am sure that Silver Flowe was the stronghold.

Two late-summer hawkies have arrived in recent years from further south. **Southern Hawker** has been spreading westwards from eastern Dumfriesshire where I first saw it in 2003, breeding in garden ponds and peaty pools on raised bogs. It has been recorded in 26 tetrads across 13 hectads.

**Migrant Hawker** has been seen sporadically since 2004, and the first larvae were recorded, in 2015, by Bob Merritt at Mersehead RSPB Reserve. In 2017 Richard and I saw 18 adults in one afternoon at Colvend Lochs, and last August, 7 at the same place; larvae and an exuvia have been found there by others. It has been seen in 18 tetrads across 7 hectads.

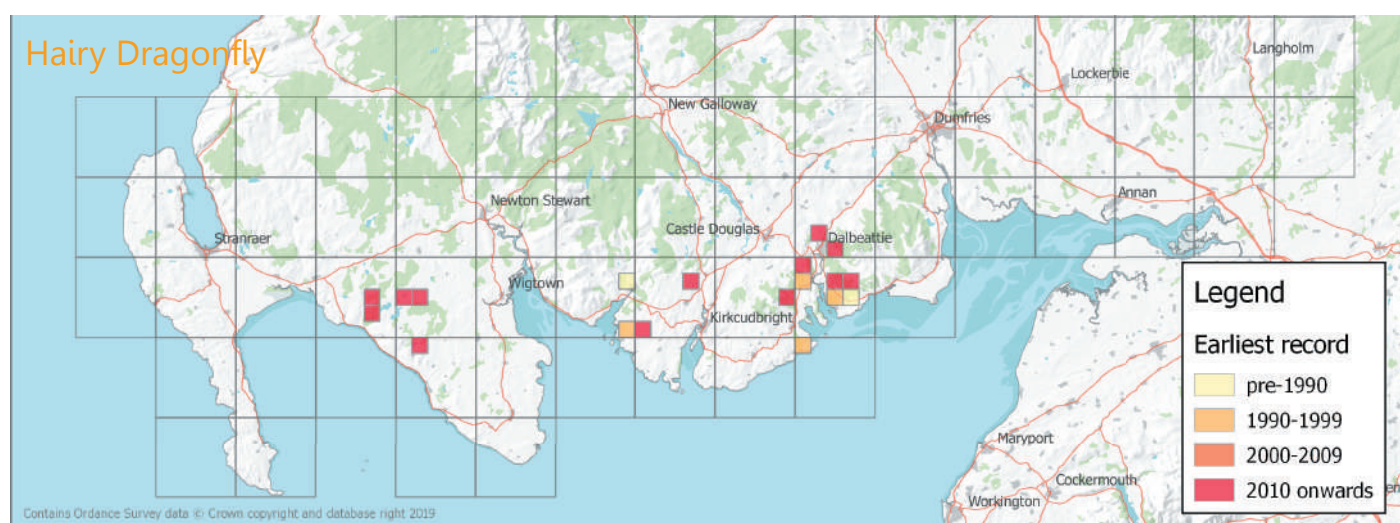
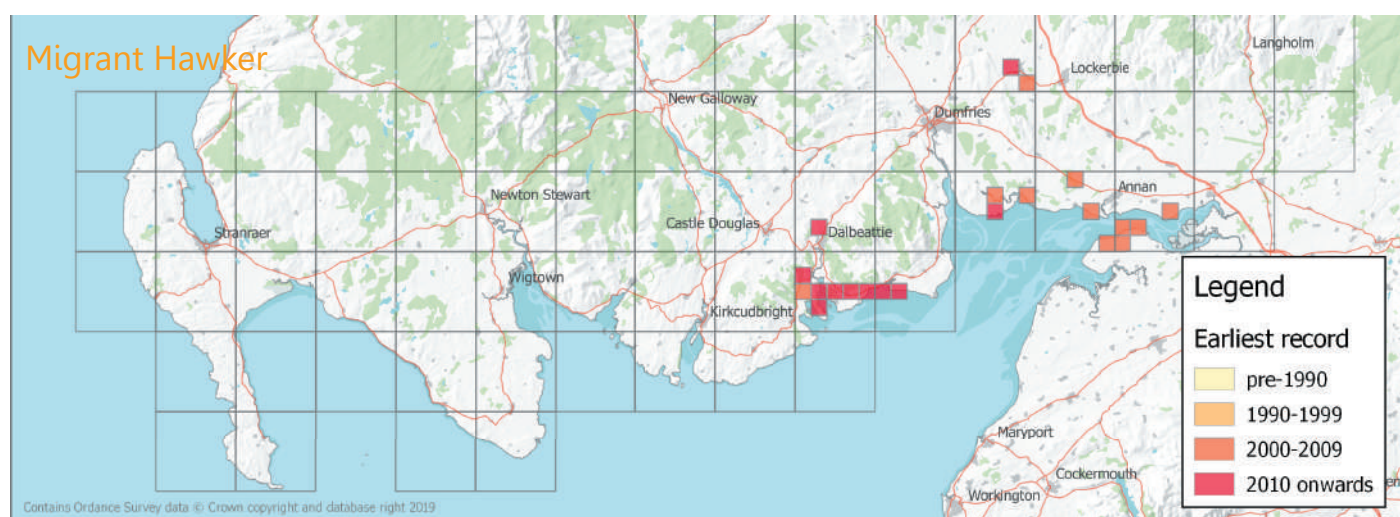
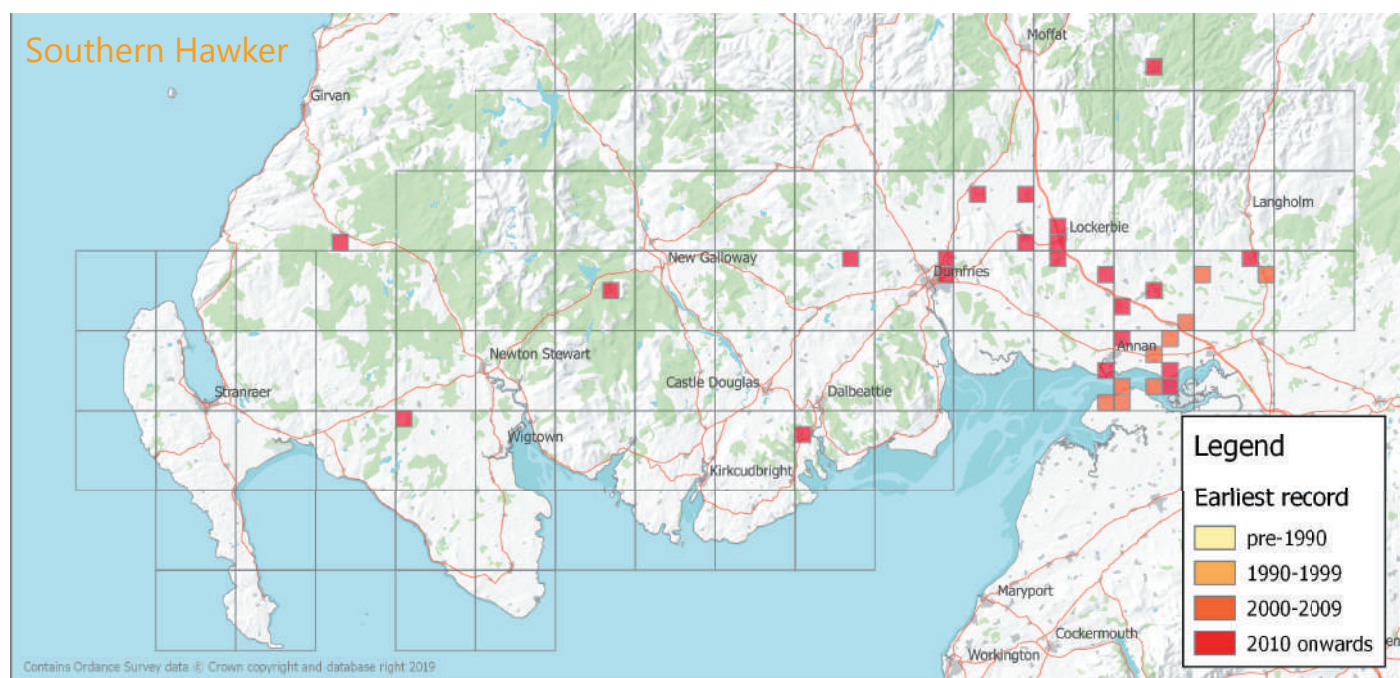
Another incomer is the **Emperor**, possibly arriving from Ireland and Cumbria, as records have been scattered right across the region, but it is not seen every year. The first sighting was in 2003 and the last verified record was in 2014. It has not been proved to breed, although it has been observed ovipositing.

**Broad-bodied Chaser** was recorded in 2006: the 2nd and 3rd records for Scotland. It breeds in Cumbria, so may yet become established if climatic trends continue. Vagrant Emperor and Red-veined Darter have also occurred.

The distribution of Odonata in South-west Scotland is changing rapidly. There are only a few local dragonfly recorders, so if you visit, please send any records to the BDS. Your help would be much appreciated!



## Distribution Maps of Species Records



The maps were prepared in January 2019 by South West Scotland Environmental Information Centre, with the assistance of Louisa Conway.





# Working in Partnership with the Forestry Commission in Lochaber

Pat Batty, Scotland Dragonfly Recorder

All six of the Nationally Important dragonfly species that occur in Scotland can be found on the National Forest Estate: Northern Damselfly, Azure Hawker, Northern Emerald, White-faced Darter, Brilliant Emerald and Variable Damselfly.

Three large National Forest Estate complexes have been identified as Priority Sites for dragonflies as well as at least 20 other of their smaller sites throughout Scotland. Glen Affric is the most well-known of these with its extensive complex of lochans, mires and upland bogs amongst pine woods, which contain over 33 breeding sites. Forestry Enterprise (FE) staff have been working informally with BDS volunteers for many years. In 2017 this was formalised with FE agreeing to recognise the major importance of their sites for dragonflies. As they have the majority of the breeding sites for Brilliant Emerald in Scotland

the FE agreed to take these dragonflies into consideration when designing their management. The Forest and Water Guidelines, which requires open areas to be left along burns and around loch margins, accommodates dragonflies to a certain extent but has the capacity for extension. Dragonfly records are now being added to the FE's Geographic Information System (GIS) and BDS volunteers have provided training for FE Conservation staff in several Forest Districts. This has proved to be mutually beneficial; FE Conservation staff have detailed knowledge of their Districts and they can provide access to perform survey work, while the BDS can share knowledge of dragonflies, their specific habitats and management requirements. Partnerships, such as this, can lead to real benefits for dragonflies; excellent examples include the work being carried out at Glen Garry and Callop Wood, Lochaber.

The Allt Lochan Fhudair, Glengarry Forest



©Claire Pegrum







©Leslie Barries

### Callop River & woodland

#### Glen Garry

Glen Garry is a large area of forest at the southern end of Loch Ness, West of Fort Augustus, that stretches from Invergarry towards Loch Quoich in the West. The area was once covered in an extensive native pine woodland, which was felled during World War II and, after which, the FE acquired the south side of the glen. The remaining small pockets of Scots pine were retained and the rest of the area was reforested with spruce and lodgepole pine. This woodland has now matured and is into its second rotation of felling and replanting in some areas. Scattered through the area are bog pools, mires and lochans.

White-faced Darter, Northern Emerald, Azure Hawker breed here and back in 1999, when the site was first identified, one of its pools, called Glen Lui, was an excellent breeding site for White-faced Darter. However, when the site was revisited in May 2018 much of the pool had become infilled, with large sphagnum mats and little open water. Only one White-faced Darter was observed emerging and no larvae were found. After a meeting with FE conservation staff it was agreed that part of the main pool should be cleared out and an additional small pool should be dug nearby. The meeting also resulted in the discovery of an excellent site for Northern Emerald and the surrounding area is now systematically grazed to maintain the open habitat the species prefers. Other possibilities for future site management include creating new pools and leaving larger margins around lochs and mires when carrying out replanting. As a result of the 2018 visit,

and the local knowledge of the Conservation staff, two new breeding sites for Northern Emerald, and one for White-faced Darter, were found. The area could potentially hold breeding habitat yet to be discovered and deserves further survey work.

#### Callop Forest

Callop Forest, near Glen Finnan, is a mature conifer plantation with a large open mire, wet rides and a large lochan. Breeding sites for White-faced Darter and Northern Emerald were found in 2008; large number of adults were seen both on the mire and in the rides, and larvae and exuviae were found. In 2017 the conifers were felled with the plan to leave the deep peat unplanted and restore it to blanket bog as part of bog restoration work to offset climate change. The restoration work has the potential to enhance the site for White-faced Darter and Northern Emerald by creating a series of small pools for them to breed in.

These are just two examples showing the potential benefits of land managers and wildlife charities working together, and how dragonflies can flourish within commercial forestry with just a small amount of extra management.



# Rare Species or Rare Recorders?

Pat Batty, Scotland Dragonfly Recorder

Pat Batty, the BDS Scottish Dragonfly Recording, discusses the challenges of recording Dragonflies in Scotland and the challenges the country's species face.

In Scotland the known range of the species listed in the British Red Data Book has increased since the 1990s. Nearly every year new sites and new hectads (10km x 10km map squares) are added for our rare species. But is it an increase in species or recorders that is causing this trend?

Scotland's red listed dragonflies include:

**Endangered** Northern Damselfly and White-faced Darter

**Vulnerable** Azure Hawker and Brilliant Emerald

**Near Threatened** Northern Emerald and Variable Damselfly

Variations in recording effort and method over time can have a massive impact the data recording projects, including DragonflyWatch, produce. For example, trains seemed to be the preferred mode of transport for pre 80s dragonfly records resulting in a large proportion of historical sites for northern species being located in areas that can be reached by train. Bob and Betty Smith and others added to these with their work in the eighties and nineties and the sites they identified for the northern species

are still the most well known and most visited. Many of the good dragonfly sites are 'off the beaten track' literally, well away from the main centres of population. Needless to say the most visited sites are those nearest to the road or easily accessed. There is a lot of potential breeding sites out there for rare species which are never visited. It is only a small number of hardy pioneers that venture off road in the hopes of discovering new sites.

Recording in Scotland has its challenges. It is often difficult to get good dragonfly weather conditions to coincide with species' flight times and recorder's availability. Unusually, this year the prolonged sunny weather lead to more sightings of Northern Emerald in new areas a distance from known sites. However, in most years, more often dragonfly spotters go home disappointed from a holiday after a wet week.

The number of recorders in Scotland increased with the push to collect enough records for the 2014 BDS Dragonfly Atlas, and has continued to grow since then, thanks to the recruitment effort of the BDS Scottish Officers and volunteers. The use of iRecord for submitting records has also helped increase the number of verified records for rare species as digital photographs can be uploaded to the database for assistance with specie confirmation.

The number of sites found to support northern species increased when recorders started recording larvae. While adults are only on the wing for a short

White-faced Darter is one of the most endangered dragonfly species in the UK







Glen Affric is home to a number of rare species including White-faced Darter

period of time, larvae can be found all year round. However, not many people roam the hills with a colander to sieve through bog pools for larvae.

The rare northern species were originally associated with the relict areas of ancient woodland but we now know they have a much wider distribution, including open hill ground. While we know that Northern Emerald, White-faced Darter and Azure Hawker are species associated with bog pools and runnels we are still learning more about their specific breeding habitat requirements. For example, we now know Northern Emerald requires sphagnum filled runnels which may or may not be in woodland and White-faced Darter larvae, on the other hand, are usually in deeper pools with sphagnum mats. Often potential sites for these species are not even marked on the map and recorders need to think outside the box. For instance, when targeting potential Azure Hawker sites, look for a widening of contours or plateaus on a map where pools may have formed but may not be shown.

If a species or area is targeted it usually leads to a surprising increase more records that completely change our understanding of a species.

The **Northern Damselfly** was once thought to be confined to a small number of sites on Speyside, near Dinnet on Deeside, and Logierait in Perthshire. It is now known from a larger number of pools in these areas, along the Spey towards the coast, and along the Dee valley to Castle Fraser near Aberdeen. There have also been casual sightings on Donside, but many areas have still not been investigated. The 10 hectads with known Northern Damselfly sites pre 2000 increased to 18 hectads post 2000.

In recent years a large breeding area for **Azure Hawker** has been recorded in the upland area between Glen Affric and Glen Moriston, and in Glen

Garry and above Loch Quoich in 2018. Since the 2014 Atlas the species has been recorded in 11 new hectads and there are still large tracts of suitable habitat to be investigated. While Azure Hawker was recorded from similar numbers of hectads pre and post 2000 (39 and 40), many of the pre 2000 sites have not been revisited. Few recorders have really looked in Caithness and Sutherland recently where there is vast potential for suitable breeding sites.

In Scotland the **Brilliant Emerald** is often found in lochans between 250 metres and 400 metres above sea level. Glen Affric and Loch Bran were the traditional sites for the species. Recently a large number of new sites have been found in hill lochans on both sides of Loch Ness, stretching northwards towards Inverness and linking what was once thought to be isolated sites. A third population is found in Argyll above Loch Awe. Could this too have other populations linked to it? Many hours of dedicated work have been involved researching this species. The number of known hectads has more than doubled from pre 2000 (8 to 20).

Looking at the distribution map for the **Northern Emerald** there are many scattered sites in the Highlands. It is known from Loch Maree, Aviemore, Morven to as far south as Argyll and Flanders Moss in Stirlingshire. It has been recorded in 67 hectads pre 2000 and 98 hectads post 2000. Since the 2014 Atlas it has been recorded at 14 new hectads, mainly in Argyll, Mull, and West of Loch Ness, from Affric northwards. The species is regularly found at some sites while at others larvae and exuviae can be found for 2 to 3 years and then not seen again. It's not known whether these populations originate from a stable source sites or are they part of a meta-population where individual site populations are only viable in good years, as some butterfly species do.



The **White-faced Darter's** known range has expanded recently in Scotland; in the past few years new sites have been added every year, sometimes as a result of casual sightings. Volunteers have been active in Glen Affric and have found lots of new areas for this species, as well as others. Surprisingly it is known to be found in about the same number of hectads pre and post 2000 (39 and 40) from mainly the same areas, with some expansion of range. Many earlier historical sites have not been revisited and there have been losses from lowland mosses.

**Variable Damselfly** is a lowland species in Scotland, known generally from lochans in the West, with a scattered distribution in Dumfries and Galloway and the Oban area. Recently, however it was seen in Ayrshire and in Kirkcudbrightshire.

With new data expanding the known range of some species we should reconsider their status, but not until we have more information. It must also be remembered that nowhere do these species appear plentiful, and many records represent a single individual and, thus, require further investigation. Our understanding is still limited; we don't know how far these species can migrate or where all their breeding sites are. There is also the possibility of localised declines as in some historic areas these species have not been seen for a number of years. In many cases this is due to a lack of revisiting, but not all; for example, Azure Hawker has not been seen in Galloway since 2016 despite intensive searching. Dragonflies are facing a number of pressures in Scotland. Wetlands are continuing to be lost through development; for example, despite much protest, a Northern Damselfly site was lost when a super market was built in Aviemore. There is also the potential impact of the land loss and habitat change due to on-shore wind farms, which has not been thoroughly investigated.

The Scottish Forestry Strategy aims to expand forestry in Scotland and plant 15,000 annually over the next few years. As we do not have a full understanding of the distribution of our upland

species our ability to direct them to low impact areas for planting is limited. Conversely, with bog restoration work for carbon capture, there are possible opportunities to expand wetland sites for dragonflies. However, without long term management, such as regular grazing, vegetation can overgrow and shade out newly restored sites. Furthermore, wetlands naturally infill over time and management work is needed to maintain areas of open water. Sites for Northern Damselfly and White-faced Darter have already been lost through lack of management.

The direct and indirect effects of climate change on Scottish Odonata are still uncertain. However, Azure Hawker, Northern Damselfly and Northern Emerald are all northern species. In the United Kingdom they reach their southern limit in Scotland. Periods of prolonged drought has been shown to have a negative impact on their larvae by causing their bog pools to dry out.

With increasing recording effort we are starting to realise that a number of our Red list species are more widely distributed than we realised. In conclusion, we don't know the status of many of these species in Scotland and need more volunteers to help build up a full picture of how Scottish species are performing, both across the country and across subsequent years. This will also us to better assess threats, such as climate change, and help mitigate their impact. Whether you live in Scotland, or go on holiday there, please visit known sites, or preferably visit new/historic sites for northern species and record what you see. Skye, Caithness, Sutherland, Lochaber, Ardnamurchan and Perthshire are just a few counties that need more recorders. Information on species sites can be found on the BDS website, NBN Atlas Scotland, iRecord and by contacting me (contact details are at the back of this magazine).

Many thanks to Larry Templeton, Colin Hall, Juliette Dinning, Jonathan Willet, Stephen Corcoran Barbara & Richard Mearns, Bob Merritt, and Peter Vandome, and all other BDS volunteers for their work.

The wetland habitats of northern species are under threat from climate change.



©Claire Pegrum





## 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
<b>Demoiselles (Calopterygidae)</b>		<b>Hawkers (Aeshnidae)</b>	
Banded Demoiselle	<i>Calopteryx splendens</i>	Azure Hawker	<i>Aeshna caerulea</i>
Beautiful Demoiselle	<i>Calopteryx virgo</i>	Southern Hawker	<i>Aeshna cyanea</i>
<b>Emerald Damselflies (Lestes)</b>		Brown Hawker	<i>Aeshna grandis</i>
Emerald Damselfly	<i>Lestes sponsa</i>	Norfolk Hawker	<i>Anaciaeschna isocles</i>
Scarce Emerald Damselfly	<i>Lestes dryas</i>	Common Hawker	<i>Aeshna juncea</i>
<b>Coenagrionidae</b>		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>	<b>Gomphidae</b>	
Variable Damselfly	<i>Coenagrion pulchellum</i>	Common Clubtail	<i>Gomphus vulgatissimus</i>
Red-eyed Damselfly	<i>Erythromma najas</i>	<b>Cordulegastridae</b>	
Small Red-eyed Damselfly	<i>Erythromma viridulum</i>	Golden-ringed Dragonflies	<i>Cordulegaster bontonii</i>
Large Red Damselfly	<i>Pyrrhosoma nymphula</i>	<b>Emeralds (Corduliidae)</b>	
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>	<b>Darters, Chaser and Skimmers (Libellulidae)</b>	
<b>Platycnemididae</b>		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		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> *

**Table 2. Category B: vagrant species: Since 1998 records of these species have been assessed by the Odonata Records Committee.**

Damselflies		Dragonflies	
Common Name	Scientific Name	Common Name	Scientific Name
<b>Emerald Damselflies (Lestes)</b>		<b>Hawkers (Aeshnidae)</b>	
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>
<b>Coenagrionidae</b>		<b>Gomphidae</b>	
Dainty Damselfly	<i>Coenagrion scitulum</i>	Yellow-legged Clubtail	<i>Gomphus flavipes</i>
** - has bred. † - has bred in the Channel Islands		<b>Darters, Chaser and Skimmers (Libellulidae)</b>	
		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>
		Yellow-spotted Emerald	<i>Somatochlora flavomaculata</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

Please submit your records directly through iRecord or send them in bulk to the local County Dragonfly Recorder, who will upload them on your behalf.

Vice-County	County Recorder	Contact details
<b>ENGLAND AND WALES</b>		
1. West Cornwall (with Scilly)	Adrian Eggett	1 Carne View Cottage, Crowntown, Helston, Cornwall, TR13 0AA Tel: 01326 712181. <a href="mailto:ajeggett@gmail.com">ajeggett@gmail.com</a> Website: <a href="http://www.timeandlightphotography.co.uk">www.timeandlightphotography.co.uk</a>
2. East Cornwall	David Cooper	12 Ashfield Villas, Falmouth, Cornwall, TR11 2EU Tel: 01326 311337. <a href="mailto:cestmaplace@outlook.com">cestmaplace@outlook.com</a>
3. South Devon	Dave Smallshire	8 Twindle Beer, Chudleigh, Newton Abbot, TQ13 0JP Tel: 01626 853393. <a href="mailto:davesmall@btinternet.com">davesmall@btinternet.com</a>
4. North Devon		
5. South Somerset	Chris Iles	Arborfield, Holcombe Hill, Holcombe, Radstock, Somerset BA3 5DN Tel: 01761 239092. <a href="mailto:kifill22@hotmail.com">kifill22@hotmail.com</a>
6. North Somerset		
7. North Wiltshire	Steve Covey	130 White Edge Moor, Liden, Swindon, Wilts, SN3 6LY Tel: 01793 349040. <a href="mailto:steve.covey@ntlworld.com">steve.covey@ntlworld.com</a> Blog: <a href="http://wiltshire-dragonfly-news.blogspot.co.uk">wiltshire-dragonfly-news.blogspot.co.uk</a>
8. South Wiltshire		
9. Dorset	Andrew Brown	Ground floor flat, 15 Lytton Road, Bournemouth, BH1 4SH Tel: 07891 573267. <a href="mailto:brown_a_r@yahoo.co.uk">brown_a_r@yahoo.co.uk</a> Website: <a href="http://www.dorsetdragonflies.org.uk">www.dorsetdragonflies.org.uk</a> / Facebook: 'Dorset Dragonflies'
10. Isle of Wight	Jim Baldwin	21 Hillcrest Road, Rookley, Ventnor, Isle of Wight, PO38 3PB Tel: 01983 721137. <a href="mailto:wightdragonflies@gmail.com">wightdragonflies@gmail.com</a>
11. South Hampshire	Paul Winter	4 Rosebank Close, Rownhams, Southampton, SO16 8AU Tel: 07482 218127. <a href="mailto:pdwinter@gmail.com">pdwinter@gmail.com</a>
12. North Hampshire	David Murdoch	Tel: 01962 808853. <a href="mailto:damurdoch@hotmail.com">damurdoch@hotmail.com</a>
13. West Sussex	Bob Foreman / Ben Rainbow	Recorder: Ben Rainbow - <a href="mailto:ben.rainbow@ntlworld.com">ben.rainbow@ntlworld.com</a> Send records to: Bob Foreman - Tel: 01273 497570. <a href="mailto:bobforeman@sussexwt.org.uk">bobforeman@sussexwt.org.uk</a>
14. East Sussex		
15. East Kent	John & Gill Brook	1 Barrack Cottages, Lower Street, Broomfield, Maidstone, Kent, ME17 1PU Tel: 01622 862227.
16. West Kent		
17. Surrey <sup>1</sup>	Bill Budd	Tel: 07968 297045. <a href="mailto:rab@budd.demon.co.uk">rab@budd.demon.co.uk</a>
18. South Essex <sup>1</sup>	Neil Phillips	<a href="mailto:neil_fal@yahoo.com">neil_fal@yahoo.com</a>
19. North Essex		<a href="mailto:@uk_wildlife">@uk_wildlife</a>
20. Hertfordshire <sup>1</sup>	Roy Woodward	62c High Street, Cheshunt, Hertfordshire EN8 0AH Tel: 07855 567332. <a href="mailto:roy.rkwoodward@ntlworld.com">roy.rkwoodward@ntlworld.com</a>
21. Middlesex <sup>1</sup>	Nigel Scott	55 Manygate Lane, Shepperton, MIDDLESEX, TW17 9EJ Tel 01932 267645. <a href="mailto:nigel.mcm@ntlworld.com">nigel.mcm@ntlworld.com</a>
22. Berkshire <sup>1</sup>	Mike Turton	7 Fawcett Crescent, Woodley, Reading, Berks RG5 3HX Tel: 07815 644385. <a href="mailto:berksdragonflies@gmail.com">berksdragonflies@gmail.com</a>
23. Oxfordshire <sup>1</sup>	Stephen Burch	<a href="mailto:stephen@stephenburch.com">stephen@stephenburch.com</a> Website: <a href="http://www.stephenburch.com">www.stephenburch.com</a>
24. Buckinghamshire	Alan Nelson	74 Holland Way, Newport Pagnell, Milton Keynes, Bucks, MK16 0LW <a href="mailto:bucksdragonflies@googlegmail.com">bucksdragonflies@googlegmail.com</a>
25. East Suffolk	Adrian Parr	10 Orchard Way, Barrow, Bury St Edmunds, Suffolk, IP29 5BX Tel: 01284 810 465. <a href="mailto:adrian.parr@btinternet.com">adrian.parr@btinternet.com</a>
26. West Suffolk		
27. East Norfolk	Pam Taylor	Decoy Farm, Decoy Rd, Potter Heigham, Norfolk, NR29 5LX Tel: 01692 670 311. <a href="mailto:pamtaylor@british-dragonflies.org.uk">pamtaylor@british-dragonflies.org.uk</a>
28. West Norfolk		
29. Cambridgeshire	Val Perrin	13 Pettitts Lane, Dry Drayton, Cambs, CB3 8BT Tel/Fax: 01954 780467. <a href="mailto:valperrin@aol.com">valperrin@aol.com</a>
30. Bedfordshire	Rory Morrissey	25 Alwins Field, Leighton Buzzard, LU7 2UF Tel: 01525 372477. <a href="mailto:dragonflies@bnhs.org.uk">dragonflies@bnhs.org.uk</a>
31. Huntingdonshire	Val Perrin	<i>See VC 29, above</i>
32. Northamptonshire	Mark Tyrrell	8 Warwick Close, Raunds, Wellingborough, Northants, NN9 6JH Tel: 01933 389 748. <a href="mailto:mark.p.tyrrell@ntlworld.com">mark.p.tyrrell@ntlworld.com</a> Website: <a href="http://www.northantsdragonflies.blogspot.co.uk">www.northantsdragonflies.blogspot.co.uk</a>
33. E. Gloucestershire	Ingrid Twissell	Arfonia, The Green, Churchdown, Glos., GL3 2LE Tel: 01452 714413. <a href="mailto:canditwissell@btinternet.com">canditwissell@btinternet.com</a>
34. W. Gloucestershire		
35. Monmouthshire <sup>1</sup>	Steve Preddy	Tel: 07989 870508. <a href="mailto:steve.preddy@me.com">steve.preddy@me.com</a>
36. Herefordshire	Chris Harris	Tel: 07779 339887. <a href="mailto:chris@cjhgraphics.co.uk">chris@cjhgraphics.co.uk</a>
37. Worcestershire	Mike Averill	49 James Road, Kidderminster, Worcs, DY10 2TR Tel: 01562 638571. <a href="mailto:mike.averill@blueyonder.co.uk">mike.averill@blueyonder.co.uk</a>
38. Warwickshire	Peter Reeve	The Outspan, Leamington Hastings, nr. Rugby, Warwickshire, CV23 8DZ Tel: 01926 632 400. <a href="mailto:peter@reeve60.org.uk">peter@reeve60.org.uk</a> / <a href="http://www.warwickshire-dragonflies.org.uk">www.warwickshire-dragonflies.org.uk</a>





39. Staffordshire	Dave Jackson	11 Hyperion Drive, Penn, Wolverhampton WV4 5QW Tel: 01902 344716. <a href="mailto:jacksongrus@talktalk.net">jacksongrus@talktalk.net</a>
40. Shropshire	Vicky Nall	45 Shropshire Street, Market Drayton, Shropshire, TF9 3DA Tel: 07598 938660. <a href="mailto:info@shropshiredragonflies.co.uk">info@shropshiredragonflies.co.uk</a> / <a href="http://shropshiredragonflies.co.uk">shropshiredragonflies.co.uk</a>
41. Glamorgan <sup>1</sup>	Mike Powell	87 Coed Glas Road, Llanishen, Cardiff, CF14 5EL Tel: 029 2076 2182. <a href="mailto:Mike.powell2011@btinternet.com">Mike.powell2011@btinternet.com</a>
42. Breconshire <sup>1</sup>	Keith Noble	25 Belle Vue Gardens, Brecon, LD3 7NY Tel: 01874 620133. <a href="mailto:knoble.kn@btinternet.com">knoble.kn@btinternet.com</a>
43. Radnorshire <sup>1</sup>	Bob Dennison	Maes y Geidfa, Crossgates, Llandrindod Wells, Powys, LD1 6RP Tel: 01597 851 702. <a href="mailto:rd19366@googlegmail.com">rd19366@googlegmail.com</a>
44. Carmarthenshire <sup>1</sup>	Stephen Coker	Mountain Grove, Clarboston Road, Haverfordwest, Pembrokeshire, SA63 4SG
45. Pembrokeshire <sup>1</sup>		Tel: 01437 563 566. <a href="mailto:stephen.coker@live.co.uk">stephen.coker@live.co.uk</a>
46. Cardiganshire <sup>1</sup>	Lin Gander	Penwalk Llechryd, Cardigan Ceredigion, SA43 2PS Tel: 01239 682405. <a href="mailto:Lingander@strandings.com">Lingander@strandings.com</a>
47. Montgomeryshire <sup>1</sup>	Anne Coker	Mountain Grove, Clarboston Road, Haverfordwest, Pembrokeshire, SA63 4SG Tel: 01437 563 566. <a href="mailto:stephen.coker@live.co.uk">stephen.coker@live.co.uk</a>
48. Merionethshire <sup>1</sup> to 52. Anglesey <sup>1</sup>	Allan Brandon	Bryn Heilyn, Rowen, Conwy LL32 8YT Tel: 01492 651 066. <a href="mailto:allanrowenconwy@sky.com">allanrowenconwy@sky.com</a> Website: <a href="http://www.british-dragonflies.org.uk/local_groups/north-wales-dragonflies">www.british-dragonflies.org.uk/local_groups/north-wales-dragonflies</a>
53. South Lincolnshire	Nick Tribe/Richard Chadd	Nick Tribe, 12 Little Bargate Street, Lincoln, LN5 8JR
54. North Lincolnshire		Tel: 01522 822069. <a href="mailto:nick.tribe@ntlworld.com">nick.tribe@ntlworld.com</a>
55. Leicestershire (with Rutland)	Ian Merrill	125 Church Lane, Whitwick, Coalville, Leicestershire, LE67 5DP Tel: 01530 815886. <a href="mailto:i.merrill@btopenworld.com">i.merrill@btopenworld.com</a>
56. Nottinghamshire	Dave Goddard	30 Cliffe Hill Avenue, Stapleford, Nottingham, NG9 7HD
57. Derbyshire		<a href="mailto:david.goddard@wyg.com">david.goddard@wyg.com</a>
58. Cheshire	John Roberts	Tel: 01829 733140 / 07775 706838. * <a href="mailto:cheshiredragonflies@outlook.com">cheshiredragonflies@outlook.com</a>
	Chris Meredith	Tel: 07731 513356. * <a href="mailto:cheshiredragonflies@outlook.com">cheshiredragonflies@outlook.com</a>
59. South Lancashire	Steve White	Tel: 0151 707 2744 (daytime). <a href="mailto:stevewhite102@btinternet.com">stevewhite102@btinternet.com</a>
60. West Lancashire		
61. S.E. Yorkshire	Martin Roberts	48 Stratford Way, Huntington, York YO32 9YW Tel: 01904 761918. <a href="mailto:vc61@yorkshiredragonflies.org.uk">vc61@yorkshiredragonflies.org.uk</a> Facebook: <a href="https://www.facebook.com/groups/yorkshiredragonflies">www.facebook.com/groups/yorkshiredragonflies</a>
62. N.E. Yorkshire	Keith Gittens	Sunnybank, Low Street, Husthwaite, York. YO61 4QA. Tel: 01347 868606. <a href="mailto:brilliantemerald@btinternet.com">brilliantemerald@btinternet.com</a>
63. S.W. Yorkshire	Alistair McLean	Museums Sheffield, Weston Park, Western Bank, Sheffield, S10 2TP Tel: 0114 278 2648. <a href="mailto:alistair.mclean@museums-sheffield.org.uk">alistair.mclean@museums-sheffield.org.uk</a>
64. Mid-west Yorkshire	Simon Joseph	11 Sandholme Villas, Earby, Yorkshire, BB18 6NF Tel: 07972 054098. <a href="mailto:simonjoseph1967@sky.com">simonjoseph1967@sky.com</a>
65. N.W. Yorkshire	Keith Gittens	As VC62
66. County Durham	*	<i>Position vacant.</i>
67. S. Northumberland	Michael Gardner	11 Garden Crescent, Ebchester, CONSETT, County Durham, DH8 0PT <a href="mailto:vc67dragonflies@gmail.com">vc67dragonflies@gmail.com</a>
68. N. Northumberland		
69. Westmorland	David Clarke	Burnfoot, Cumwhitton, Brampton, Cumbria, CA8 9EX Tel: 01228 560117. <a href="mailto:davidclarke6970@gmail.com">davidclarke6970@gmail.com</a>
70. Cumberland		
71. Isle of Man	Pete Hadfield	Tel: 07624 471794. <a href="mailto:iomodone1@gmail.com">iomodon1@gmail.com</a>
<b>SCOTLAND</b> 72. Dumfriesshire to 112. Shetland	Pat Batty	Kirnan Farm, Kilmichael Glen, Lochgilphead, Argyll, PA31 8QL Tel: 01546 605 316. <a href="mailto:dragonfly.batty@gmail.com">dragonfly.batty@gmail.com</a>
113. Channel Isles	Jersey Biodiversity C.	01534 633393. <a href="mailto:jbc@societe-jersiaise.org">jbc@societe-jersiaise.org</a> / <a href="http://jerseybiodiversitycentre.org.je">jerseybiodiversitycentre.org.je</a>
	Guernsey BRC	01481 715799. <a href="mailto:gsybiorec@cwgsy.net">gsybiorec@cwgsy.net</a> / <a href="http://www.biologicalrecordscentre.gov.gg">www.biologicalrecordscentre.gov.gg</a>
	Alderney WT	<a href="mailto:admin@alderneywildlife.org">admin@alderneywildlife.org</a> / <a href="http://www.alderneywildlife.org">www.alderneywildlife.org</a>
<b>NORTHERN IRELAND and EIRE</b>	Damian McFerran	National Museums Northern Ireland, Cultra, Holywood, Co. Down, BT18 0EU Fb: 'Dragonfly Ireland' / Web: <a href="http://www.nmni.com/CEDaR/CEDaR-submitting-records.aspx">www.nmni.com/CEDaR/CEDaR-submitting-records.aspx</a>
<b>Migrant Dragonfly Project</b>	Adrian Parr	10 Orchard Way, Barrow, Bury St Edmunds, Suffolk, IP29 5BX Tel: 01284 810 465. <a href="mailto:adrian.parr@btinternet.com">adrian.parr@btinternet.com</a>
<b>RECORDS OFFICER</b>	David Hepper	12 Three Stiles Road, Farnham, Surrey, GU9 7DE Tel: 01252 721053. <a href="mailto:records@british-dragonflies.org.uk">records@british-dragonflies.org.uk</a>

<sup>1</sup> Don't worry about county border changes! Once records have a grid reference they will be seen by the correct CDR for verification.

\* Indicates that the CDR or the asterisked details have been updated recently.

**Amendments or corrections? Please contact the BDS Records Officer, David Hepper: [records@british-dragonflies.org.uk](mailto:records@british-dragonflies.org.uk)**



