

Spring 2017 Issue 34

# Darter

## Magazine



### Climate Change

brings 11 species of dragonfly  
to the UK

### Clubtail Count 2017

Join the quest  
for this elusive  
dragonfly

## Welcome

Hello and welcome to the 2017 edition of Darter Magazine. We hope you are as excited as we are about the upcoming dragonfly season because we have some fantastic projects for you to get involved with this year. We have also updated the look of Darter magazine and we hope you like it. Read on to find out about Clubtail Count 2017, the new dragonfly species you can keep your eyes out for this year plus much more!

*Genevieve*

Genevieve Dalley, **Editor**



Cover image: Lesser Emperor (*Anax parthenope*) © Christophe Brochard

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The Common Clubtail Dragonfly, subject of a new citizen science survey run by the BDS this year © Christophe Brochard







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The Southern Emerald Damselfly was found once more at its recently established breeding site in Kent in 2016, but the status of the species in the UK remains unclear.

## Migrant and Recent Colonist Update

Adrian Parr, Migrant Dragonfly Project Coordinator

It was a relatively uneventful year for migrant species during 2016, though some of our recent colonists fared somewhat better. 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. The ongoing range expansion of several recent colonists in particular merits continued monitoring.

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**Southern Emerald Damselfly:** This species was recorded once again at its well-known breeding site at Cliffe in Kent. Elsewhere, the only further record came from the species' other key site at Winterton in Norfolk. This however involved just a single individual seen some distance from its 'usual' pools. The exact status of the species in this area clearly requires further research.

**Willow Emerald Damselfly:** This recent colonist went from strength to strength during 2016, with reports from no less than four new counties (Bedfordshire, Buckinghamshire, Lincolnshire and Northamptonshire). Although

now increasingly widespread in south-eastern England, the species does however seem to still be absent from the High Weald of Kent/Sussex. It will be important to continue monitoring the spread of the species during 2017; late August and September seem to be particularly good times for picking up new site records.

**Southern Migrant Hawker:** The species showed well in its current UK strongholds around the greater Thames Estuary. Records included a number from Hockley Woods in Essex, a rather different habitat type to the coastal marshes from which they are more regularly reported. In addition to these sightings, there were signs that the species may now be starting to expand its UK range. Several individuals were noted in the Colne Point/St Osyth area of north Essex during early August, and a report from Kew in Greater London/Surrey is currently being assessed by the national Odonata Records Committee.

**Norfolk Hawker:** Although perhaps less spectacular than some recent sightings, further evidence of ongoing range expansion was provided by records during the summer from Thompson Common in west Norfolk and from Wicken Fen in Cambridgeshire.



**Vagrant Emperor:** The recent run of sightings continued; as in 2015 all confirmed records again came during the autumn, though the species can potentially turn up in Britain at any time of year. Two individuals were seen in both the Scilly Isles and the Orkneys, with a further record from north Norfolk.

**Lesser Emperor:** It was a fairly average year with reports from some 14 sites, primarily in southeast England but including records from Shropshire and Derbyshire. Sightings mostly seemed to refer to primary immigrants, though some locally-bred individuals may also have been involved. One such candidate was a male seen at the Trinity Broad complex in Norfolk, a site where several Lesser Emperor had previously been noted in both 2014 and 2015.

**Scarce Chaser:** This once rather scarce and localised

species is currently expanding its range quite significantly, aided by internal dispersal. Noteworthy sightings during summer 2016 included the first records for Lincolnshire (near Throckenholt) and a report from Ratcliffe-on-Soar, Leicestershire.

**Red-veined Darter:** The 2016 season turned out to be one of the species' quieter years by modern standards. Despite this, there were clear signs of a small spring influx. Some early-season sightings also involved locally-bred individuals; emergents/tenerals were thus noted at Spurn, East Yorkshire, and at Dozmary Pool, Cornwall. Immatures were also reported from a few other sites (e.g. Severn Beach, South Gloucestershire), but these are perhaps less conclusively of local origin. Later in the year autumn records were again few, and no locally-bred 'second-generation' individuals were reported. The fortunes of current British breeding sites clearly deserve further monitoring.

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





# DragonflyWatch and iRecord

Pam Taylor, Dragonfly Conservation Group Convenor

Whether you are new to recording or an old hand, I really hope you will read this article in full. There is basic information here for the true beginner, but there are also some golden nuggets of knowledge and a few vital reminders for the more experienced.

First a quick explanation of DragonflyWatch itself. This is the overall name given to our recording initiatives and the best way to think of DragonflyWatch is as a ladder. With more time and/or more experience, dragonfly watchers are encouraged to climb that ladder. As they do so, the records they produce have wider use. I must stress here however, that all records are valuable and even the most experienced dragonfly enthusiast will still contribute records at the lowest rung. The BDS makes good use of every record.

So the first rung on our ladder is the level of casual records. These 'Dragonfly Spot' basic records include one-off sightings, photographs, dragonflies recorded on British Trust for Ornithology (BTO) and Butterfly Conservation surveys, as well as occasional garden records. Those just beginning to record dragonflies may only be able to identify a few species to start with. We welcome those records here even if other, still unrecognised species, can't yet be recorded. Records from this level of recording are used to map distribution and to study changes in range. They can also be used to show phenology; that is the timing of flight seasons year-on-year.

The second rung of our ladder requires good identification skills, but is the kind of recording we'd really like everyone to strive for. It's 'Site Lists'; that is a complete species list of all the dragonflies you see during a single visit to a wetland site. Ideally you'd visit the same site several times each year, and in successive years, but even a single complete list from a site is useful. These complete lists are used to produce trend data that inform us about whether dragonfly species are increasing, declining or holding steady over time. With our aim of producing a State of Dragonflies Report in 2020 as a follow-up to our recent Atlas of Dragonflies in Britain and Ireland, this trend data is vital.



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Village ponds, like this one in Aldbury, can be adopted by a dragonfly recorder.

Running complementary to this middle rung of our ladder is the idea of 'Adopt a Site'. Many birders carry out local patch recording and we'd like as many dragonfly enthusiasts as possible to do the same. If you can adopt-a-site and visit it regularly, you will soon build up a good range of complete lists covering all the resident and visiting species to that location. This is incredibly useful data for our trend analyses and other potential projects.

Progressing beyond the second rung, if you can add abundance and breeding information to your complete site lists then they increase in value yet again. Anything from tandem pairs and ovipositing females, to larvae, emergents and exuviae can be counted. By adding this additional information to your records you help us to identify important sites for dragonflies; to discover or confirm 'Priority Sites'. In order to record the breeding behaviour of as many of the site's inhabitants as possible, at least three visits between May and September are usually needed.

Finally we've reached the third and highest rung of our ladder. Once a 'Priority Site' is suspected or has been confirmed, experienced observers and site managers are encouraged to carry out systematic visits. The data collected now, including both abundance and breeding data, can be used to monitor and evaluate the site. Details of our suggested monitoring protocols can be found on the 'Recording' tab of our BDS website. To ensure this data can also be used for trend analysis, any transects walked should fall within a single one kilometre grid square.

So, you have your records, but what do you do with them? Well the preferred answer now is to enter them into iRecord. This is a web-based system that can be accessed from your desk-top computer, smart phone, tablet or laptop. If you have a casual record of a single adult dragonfly then this can be



entered through the 'casual record' option on the 'Record' tab of the iRecord website homepage. You do not need to log in to the site to do this and it's quick and easy, but only one-off adult-only records should be entered this way. It is much better to use the dedicated dragonfly pages or the iRecord Dragonfly app – read on.

Website options first. If you have life stage information to add or multiple species for a site to enter, then you need to create an iRecord account. You only need to enter your email address and choose a password, but this will give you website access to the 'Activities' option on the 'Record' tab. From here you should search for and choose 'British Dragonfly Society recording'. Click on the gold star to add this scheme to 'My activities' and it will default to here each time for quicker access. This route to the recording pages allows you to enter complete lists for a site, including abundance data for each of the separate life stages. Please remember to tick the box for 'Recorded all species?' if it is indeed a complete list. Once you have entered all the necessary information on both pages and clicked 'submit' the screen will return to the blank entry page enabling you to enter another complete list if you wish.

I must point out here that if you enter your records directly through the BDS website 'Recording' tab, rather than on the iRecord website, then you will be taken straight to the specialist dragonfly recording forms anyway. This link will also take you straight to the relevant pages <http://www.brc.ac.uk/irecord/join/british-dragonfly-society-recording> and is equally easy to use if you have access to the internet.

As I mentioned above, there is also the dedicated iRecord Dragonfly app. To be honest this isn't a true app, so you can't download it from an app store. It must be downloaded from our own BDS website. If you do this from the BDS website you won't fall into the same trap I did. The BRC iRecord logo is a dragonfly, so I inadvertently downloaded the general iRecord app and then wondered why I couldn't access the special features I'd expected to see such as multi-species entry and life-stage options. I was soon told the error of my ways and I now have the correct version installed.

For beginners and those who need an occasional memory-jogger, this app has the added advantage of species photographs. All you need to do is touch the species photograph to get an enlarged version. Swiping across then gives you pictures of the different sexes and often other poses.

To summarise; we need as many records as possible and the greater the detail you can add, the more uses we have for your data. If you can, please Adopt-a-Site and always record Complete Lists to help us prepare for the State of Dragonflies Report in 2020.

Remember – Every Record Counts!

### **An additional note from our records officer, David Hepper:**

Many people outside the Society (and some within) are confused by the name Dragonfly Recording Network (DRN). Is it a separate organisation to the BDS? Do I have to become a member? Vice Counties are also anachronistic, though useful for comparison with old data. Modern administrative counties are drifting further from the Watsonian vice-counties as time passes, making it hard for field recorders to be sure to whom their records should go. Fortunately, using iRecord makes this simpler. Observers can simply enter records onto iRecord, including their own take on which VC the record is for and the system assigns it to the appropriate Verify queue.

To simplify the naming, the Dragonfly Conservation Group, a committee of the BDS, has agreed to drop the name Dragonfly Recording Network (DRN) and rename both our recording scheme and our recorder-verifiers, as follows:

- 'DRN' becomes 'BDS Recording Scheme,' which should not be further abbreviated.
- VCR becomes 'BDS County Dragonfly Recorder', which may be abbreviated to CDR.

However, it will take some time for the old terms to be removed fully from the BDS website, iRecord and NBN.

The Dragonfly app, with photographs, flight charts and habitat information for each species.

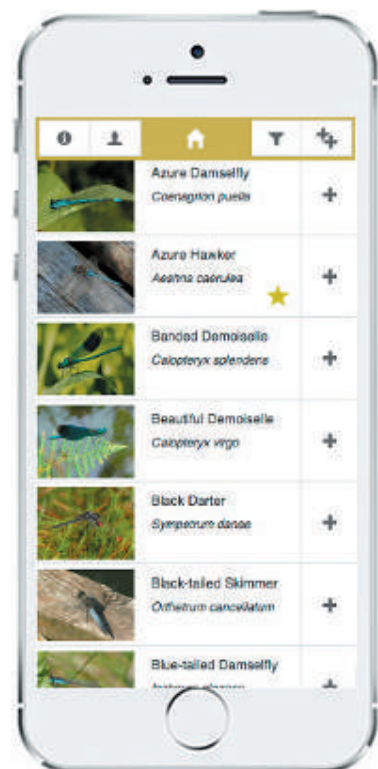


Image courtesy of the BRC





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The Southern Skimmer (*Orthetrum brunneum*) is one of six species considered likely to appear in the British Isles in the near future.

## Potential new species of Odonata for the British List

Adrian Parr, Migrant Dragonfly Project Coordinator

Since 1995, no less than 11 species of dragonfly or damselfly have been recorded from Britain either for the first time ever, or after a long period of absence. The species involved are listed below, along with the year of their first modern occurrence. Asterisks denote species that are known to have bred successfully in Britain, with many having now gone on to become well-established residents.

1995: Scarlet Darter *Crocothemis erythraea*; Banded Darter *Sympetrum pedemontanum*

1996: Lesser Emperor *Anax parthenope*\*

1998: Green Darner *Anax junius*

1999: Small Red-eyed Damselfly *Erythromma viridulum*\*

2002: Southern Emerald Damselfly *Lestes barbarus*\*

2006: Southern Migrant Hawker *Aeshna affinis*\*

2007: Willow Emerald Damselfly *Chalcolestes viridis*\*

2008: Winter Damselfly *Sympecma fusca*

2010: Dainty Damselfly *Coenagrion scitulum*\*

2012: Large White-faced Darter *Leucorrhinia pectoralis*

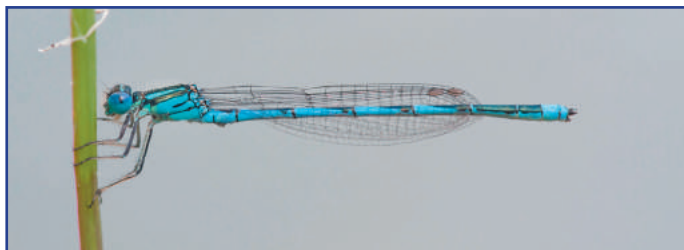
The factors underlying these numerous new British records (the species involved accounting for some 20% of the current UK dragonfly fauna) are no doubt varied. The increasing numbers and experience of local dragonfly-watchers must play some role in producing new records for Britain, by

greatly increasing the likelihood that rare events are accurately recorded and reported. Simple chance must also lie behind a few of the records. Most new sightings are however a reflection of the large-scale range expansions that are presently being shown by many European dragonfly species, almost certainly as a result of climate change. With climatic trends still continuing, such range changes are progressing apace, and it is highly likely that further new species of Odonata will appear in Britain over the next few years. Six likely candidates are outlined below with images shown above each:

**1** Southern Skimmer (*Orthetrum brunneum*)  
The Southern Skimmer is clearly expanding northwards at present. Since the turn of the century occasional records from Kaliningrad Oblast, Russia, and from Lithuania have started to appear, and an individual was even noted in Latvia during 2005. Closer to home, at least one individual was recorded from the Channel Islands in July 2001 and small populations have become established in parts of the southern Netherlands since 1995, though the species is still quite rare there. Although perhaps not expanding its breeding range quite as rapidly as some other "southern" species, the future appearance of occasional immigrants in Britain is clearly a distinct possibility.

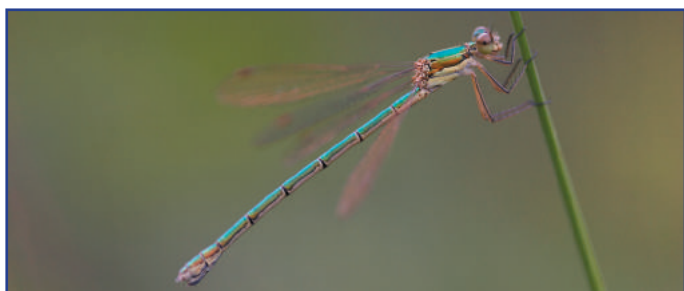






## 2 Goblet-marked Damselfly or Blue-eye (*Erythromma lindenii*)

This species used to be rare and erratic in The Netherlands, but has gained ground since the 1990s, and it is now quite common in the southeast. An expansion has also been noted in Belgium and northern Germany, and the recent Atlas of European Dragonflies & Damselflies suggests that the species has extended its range northwards by about 200 km since the 1990s. This puts Britain within striking distance of its continued range expansion.



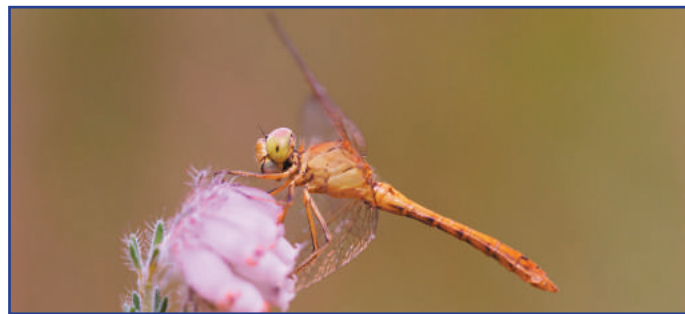
## 3 Small Emerald Damselfly or Small Spreadwing (*Lestes virens*)

The Small Emerald Damselfly has long been established in the eastern part of The Netherlands, but since the turn of the century it has become noticeably more common and widespread in the country, with an increasing number of records from the North Sea coastal dunes. The species has also become more abundant in Germany and southern Sweden in recent years, and given the recent colonization of Britain by several other continental Lestids, its appearance in the UK may not be far away.



## 4 White-tailed Skimmer (*Orthetrum albistylum*)

This species has expanded northwards throughout much of its European range over the last 40 years, particularly since the 1990s. There have been recent records from the southern Baltic States and from Kaliningrad Oblast, Russia, though the species seems not yet to be reaching as far north in Western Europe. The first record for Belgium was however made on 7 July 2016, and Britain must now be considered as being on the edge of the species' potential range.



## 5 Southern Darter (*Sympetrum meridionale*)

This species has increased in abundance in northern France and southern Germany over recent decades. It was first recorded (apart from one very old record) in The Netherlands during 1994, following which further sporadic sightings occurred until a major invasion took place in 2006. Since then the species has been seen annually, with a few mostly small and short-lived breeding colonies having even been found. In Belgium, the situation is clearly very similar to that in northern France/The Netherlands, with increasing numbers of reports since 2006. The current most northerly records for Europe appear to be from the Curonian Spit in Kaliningrad Oblast, Russia, with two sightings in 2010. Especially as the Southern Darter is known to undertake medium to long range migrations over parts of its range, it seems highly likely that the species has in fact already occurred in Britain over the last few years, but has gone unrecognized due to its close similarity to other darter species. Its positive identification is thus probably not far away.



All photos © Christophe Brochard

## 6 Northern White-faced Darter or Ruby Whiteface (*Leucorrhinia rubicunda*)

In addition to those continental species currently expanding their range, it is also worth noting that certain other species may potentially occur in Britain in the future, though are perhaps less likely to colonise. One such candidate must be *Leucorrhinia rubicunda*. Unlike some other white-faced darter species this has known dispersive potential, and the movement of Large White-faced Darter that saw sightings in Suffolk during 2012 is now known to have been accompanied on the Continent by a smaller number of *L. rubicunda*. The latter species may thus perhaps also occur in Britain in years to come. Indeed there is speculation that three vagrant *Leucorrhinia* seen in Suffolk during 1992, which were at the time ascribed to White-faced Darter *L. dubia*, may actually have been *L. rubicunda*. Certainly any 'out-of-range' *Leucorrhinia* sp. needs to be examined very carefully.



# Clubtail Count 2017: join the quest for this elusive species

## David Tompkins, Clubtail Count Project Coordinator

The British Dragonfly Society is on the hunt for this rare and beautiful dragonfly and we need your help!

Around February last year, I started to think about what I could do for Dragonflies in the coming Spring and Summer. I realised that Common Clubtail dragonflies were quite interesting and that Shropshire had a random assortment of records with many blank areas. So I decided to attempt a survey for them, on behalf of the British Dragonfly Society, both looking for them personally and also recruiting volunteers to look for them along the River Severn in Shropshire. I took on the role as Project Coordinator for this project, in a voluntary capacity, with support from the BDS Conservation Officer, Genevieve Dalley.

By May I had 13 people signed up to look for them across Shropshire, including some knowledgeable people in a canoe! I asked everyone to look for adults and also the distinctive exuviae, providing ID guides and special survey forms to all volunteers. Many volunteers successfully found exuviae once I had given them pointers on what to look for and where.

The volunteer surveyors and I managed to collect close to 90 new records of the Common Clubtail across Shropshire and on its borders with Worcestershire and Montgomeryshire. There was a nice spread of records across the county, with the few empty areas tending to coincide with steep inaccessible banks or a lack of footpaths. This now gives us a nice baseline with which to compare future Common Clubtail counts or surveys which brings me nicely round to the next stage, a national Common Clubtail survey!

Following the success of the Shropshire Clubtail Survey, I approached the BDS with the suggestion of expanding the survey further, covering all Common Clubtail rivers nationally. Because of the concern that Common Clubtail numbers are in decline on several rivers, the BDS were keen for such a survey to happen. In addition to this, a citizen science survey based on rivers would be a great way to connect people with their local river and the wildlife found on it, and provide some much needed publicity for the little known Common Clubtail dragonfly. And so the Clubtail Count 2017 was born!



A Common Clubtail Dragonfly exuvia found near the River Severn in Shrewsbury town centre, Shropshire, last year.

We will be looking at several river systems including the Severn, the Wye, the Thames, the Welsh Dee, and Warwickshire Avon amongst others. We will also be including rivers which have only very occasional Clubtail records or none at all but are suspected of holding a breeding population. For example, there are several records of Common Clubtail around the River Vyrnwy, but there is uncertainty as to whether or not they breed in the river. It would be great if someone could manage to find an emerging adult or an exuvia on the banks of this river!

All volunteers will receive a survey pack including a welcome letter with survey instructions, an ID guide to the Common Clubtail, a map of their chosen survey area and a survey form.

We also welcome records of any other dragonfly or damselfly species volunteers find whilst surveying their chosen area, so be sure to note these on your survey form. Any Common Clubtail

sightings found by volunteers outside their chosen monad/s are also welcome, but be sure to note this on the survey form. If you are interested in taking part in the national Clubtail Count 2017 please get in touch with David Tompkins at: david.tompkins@hotmail.co.uk





© Sir Charlie Burrell

Tamworth pig and Longhorn cattle at Knepp.

## Rewilding the River

Penny Green, Ecologist, Knepp Rewilding Project

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

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

But what makes it bad for farming makes it excellent



for aquatic invertebrates. The clay loves to hold water and we are blessed with several historic water bodies, such as a freshwater pond (which holds a colony of the beautiful water-violet), a hammer pond and a mill pond from the 16th century iron industry. More recently new water bodies have been established with the help of the Environment Agency and the Freshwater Habitats Trust, directed by the Sussex Wetland Officer, Fran Southgate and teams of volunteers.

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

The restoration begins with the soil in the river catchment area – 1,000 hectares are reverting from ploughed land to pasture, scrub and woodland. The tributaries of the river have been encouraged back onto their floodplains by obstructions and the creation of scrapes. Weirs and ditches have been removed and meanders created over several kilometres of river.

Historic mapping and research illustrated that the river had been canalised for drainage in the early nineteenth century. The old meanders were clearly visible in the floodplain. Modern flash flooding was exacerbated by a Victorian drainpipe and ditch system throughout the floodplain, all designed at getting water off the land as quickly as possible.



The overall objective was to restore the stretch of the River Adur crossing Knepp to its natural meanders, reconnecting it with the surrounding floodplain water meadows.

Early indications are promising and it is hoped that in the coming years improved morphological diversity will see increases in populations of key species including wading and nesting birds, insects, amphibians, aquatic and semi-aquatic vegetation.

The restoration of the channel and floodplain has had to incorporate the wider catchment objectives for the Adur system and Knepp re-wilding programme.

This restoration work has resulted in the re-naturalisation of just over 8km of the river, streams and brooks across the Estate; including the removal of weirs that were barriers to migratory fish; the creation of 70 acres of floodplain; and the conversion of a linear pond into a proper functioning river.

We hope that the river restoration project will help reduce downstream flooding and set an example for similar projects in the future. By paying farmers to hold water upstream, Knepp hopes to demonstrate less pressure is brought to bear on infrastructure, farmland, roads, bridges and conurbations downstream.

The wider benefits to the Knepp Estate though, are in biodiversity improvements. As part of my survey program I was keen to start looking at the different dragonfly and damselfly species that are using the water bodies here. Not surprisingly the weather wasn't optimum dragonfly spotting weather on many of the dates we'd set for our surveys in 2015, but there was one good day – the 11th June. The temperature was 22°C at the beginning of the day and it just got hotter, and hotter, and more humid. No cloud and a very gentle wind. Perfect. I set out into the Wildland with Julie and Malcolm Redford, my dragonfly compadres for the day. Our first stop was the pond at the Knepp Safari Campsite in the middle of the area known as the Southern Block. Standing on the bridge we spotted the usual species: Common Blue Damselfly, Broad-bodied Chaser, Large Red Damselflies...and hang on...three male Scarce Chasers!

This set the bar for the rest of the day. We saw 18 Scarce Chasers in total – 14 male, two female and two immature – on ponds, lags and streams across the estate. That day we recorded 11 other species of odonata, including White-legged and Red-eyed Damselflies, Hairy Dragonfly and Black-tailed

Skimmer. Scarce Chasers are present on the River Adur, and have been recorded at Knepp previously but not in these numbers.

In 2016 I repeated the baseline dragonfly surveys that were conducted prior to the river restoration work in 2005.

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

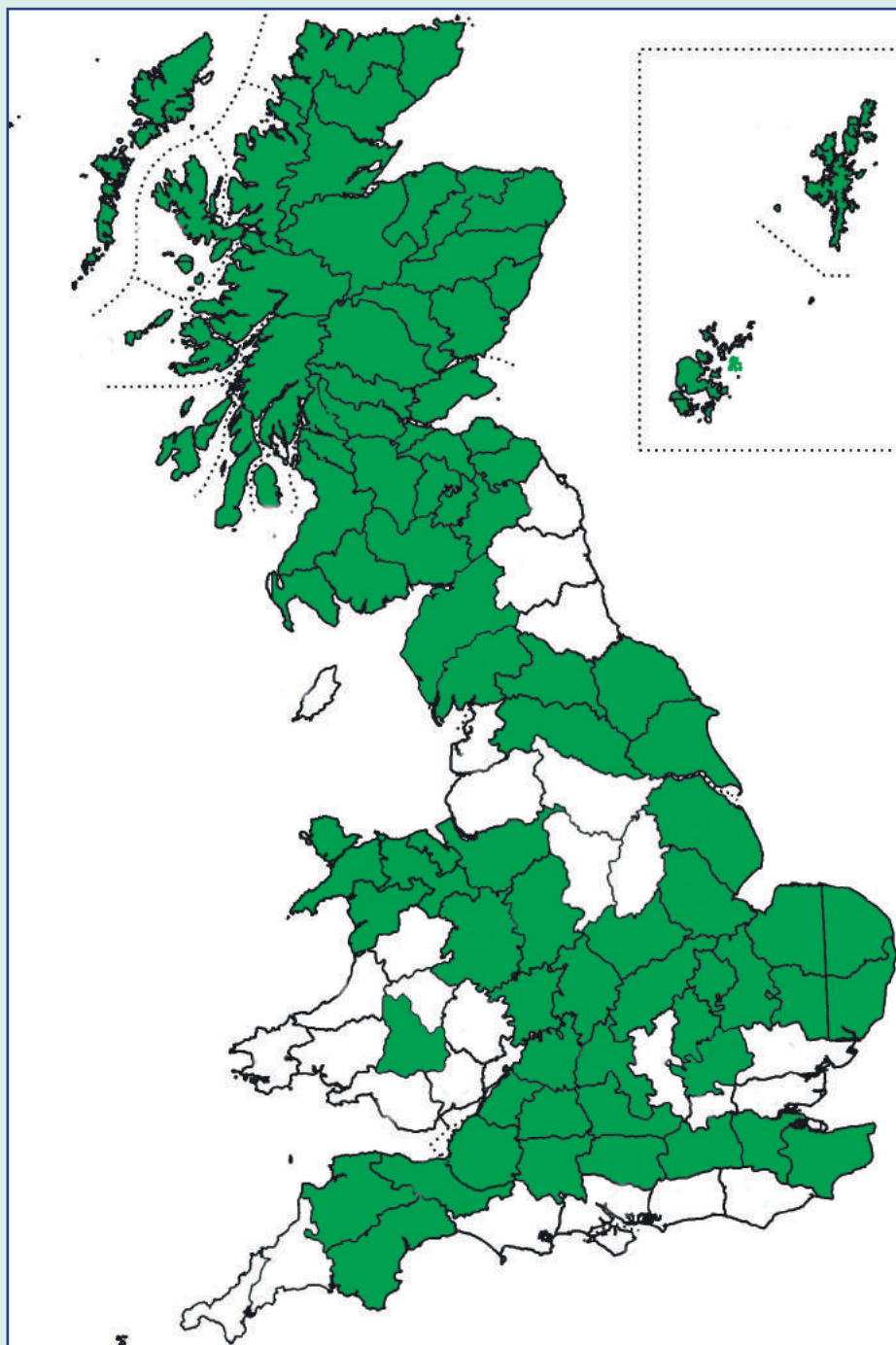
No doubt improvement in water quality from the withdrawal of pesticides and chemical fertilisers has contributed to the increase in abundance of this species group, which includes a number of Banded Demoiselles and Beautiful Demoiselles – both particularly sensitive to pollution. In the 2005 June survey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

More scrapes have since been created using the RSPB's rotary ditcher and we've been out doing some drain-bashing in the hope that these new shallow water bodies will provide some more dragonfly habitat in due course.

If you would like to come and see Knepp Wildland we have a beautiful campsite situated in a wildflower meadow, with luxury shepherd's huts and yurts, as well as pitch-your-own camping. Safaris exploring the Wildland and its wildlife run several times a week. Visit [www.kneppsafaris.co.uk](http://www.kneppsafaris.co.uk).

Scarce Chaser at Hammer Pond, Knepp.





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

#### Devon - VC 3 & 4

*Dave Smallshire*

It was a rather uneventful year, the weather not aiding any improvement in adult numbers, which have now been at a low ebb in the county for several years. Despite this, the peak **Southern Damselfly** transect count at Aylesbeare Common was almost as good as in 2015, with 173 on 21st June, while Venn Ottery Common peaked at 42, a significant increase in even-year numbers (the re-establishment

releases were in odd years, 2007 and 2009). However, there are concerns about the long-established population at Colaton Raleigh Common, where only singles were counted on the transect (although five different individuals). Small numbers were also seen at the known sites at Moortown Bottom and Prewley Moor, Dartmoor.

A few **Small Red Damselflies** were also seen during the Colaton Raleigh transects, though even fewer than usual, and at

Moortown Bottom. Up to 31 were counted at Bystock DWT Reserve, more than usual. An immature female **Scarce Blue-tailed Damselfly** was found at Meeth Quarry on 19th June, raising hope that this species has survived the flooding of the large claypits at this DWT reserve.

Only small numbers of **Red-eyed Damselfly** were recorded on the Grand Western Canal (a maximum of only four in a section), but 12 were counted at Ventiford Pools, near Stover, with suggestions of breeding there for the second year. A few were seen on ponds within Stover Country Park and beside Exeter Canal at Double Locks, with large numbers as usual along the canal itself. **Small Red-eyed Damselflies** were also seen as usual along Exeter Canal and at Lower Bruckland Ponds, while between these two sites, a pond in Sidbury was a new site for the species and suggests that the species is more widespread than current knowledge would suggest. At Seaton Marshes, a few were seen at the Borrow Pit and egg-laying along a nearby ditch (where **Ruddy Darter** has bred in the past).

**Hairy Dragonflies** were seen at Bystock, Little Bradley Ponds and Dart's Farm Pools, Topsham. A Hairy Dragonfly exuvia found on 20th May along the Grand Western Canal was the first proof of successful breeding there, followed four days later by five males. Two teneral **Scarce Chasers** were seen here on the first date, followed by ones and twos up to 19th July. A teneral was photographed at Trinity Hill LNR, near Axminster, on 24th June, presumably having emerged from the Axe Valley at least two miles (3km) away. Scarce Chaser breeding activity was reported from Dart's Farm pools in early June, adding to our knowledge of the distribution in the Exe/Clyst Marshes. A search by the joint BDS/DA meeting along the Otter at Tipton St John in June failed to find the hoped-for Scarce Chaser, the only sighting of note being a **White-legged Damselfly**.



© Dave Smallshire



A male **Common Hawker**. Records of this species in Devon would be particularly welcome in 2017.

**Downy Emeralds** were seen as usual at Bystock and Little Bradley Ponds DWT Reserves between mid-May and the end of June, while exuviae were found at Little Bradley Ponds and at one of the Stover ponds on 22nd May.

With climate warming, there is concern that two of our moorland species may decline. **Common Hawkers** were recorded on Dartmoor at Statt's Bridge, Blackslade Mire and Small Brook (near Avon Dam), while records of this species from Aylesbeare Common and Witheridge Moor (mid-Devon) were welcome. There were a few reports of **Black Darters** on South Dartmoor at 300-400m altitude, but not in places where they have been seen in the recent past. Can I make a plea for more searching and recording of these two species, please?

Finally, another plea: to submit records using iRecord, if possible. And thanks to all those who have done so, or sent me records in other ways.

#### **Somerset - VC 5 & 6** *Chris Iles*

Although an improvement on a dismal 2015, numbers of dragonflies were a shade below normal in 2016. The common

lowland species were present where and when they should be in fair numbers, and in the case of the **Variable Damselfly** on the Levels numbers were quite encouraging. Some of the less common species did not appear to do quite so well – only one record was received for the **Scarce Chaser**, two for the **Hairy Dragonfly** and very few for the **White-legged Damselfly**. For the second successive year, the **Ruddy Darter** was not reported at all.

Coverage from upland areas was sparse, although more records

An **Emperor**, which could not fly, acting as an ambassador at National Trust Tyntesfield, Somerset.



© Steve White

than usual were made of **Keeled Skimmer** – it was particularly pleasing to record this species from a new site, Winsford Hill on Exmoor. There must surely be more colonies of this very local species to be found in upland Somerset.

At Tyntesfield House (National Trust), a week-long event was organised by Steve White. A small ornamental pond at the centre of the kitchen garden served as the centrepiece for the **Emperor Dragonflies** emerging in some numbers from it. The actual emergences took place at night, so the dragonflies themselves were rarely seen, but the exuviae drew visitors' attention and the larvae themselves could be seen, prowling around the pond's stone walling. Adult visitors to the pond consisted of **Azure Damselflies** and **Broad-bodied Chasers**; on occasion the females of the latter were mistaken for hornets.

#### **Wiltshire – VC 7 & 8** *Steve Covey*

The long winter this year meant that the first Odonata were appearing a little later than recently – although probably around average over a longer period of time! **Large Red Damselflies** were first seen at

Cadnam Common Pond in the New Forest [VC8] on 17th April and the first Large Reds in North Wiltshire [VC7] were seen at Penn Wood, Calne on 3rd May. Most species then appeared in their usual order throughout the season with the usual last sightings being of **Common Darter**. A pair in cop were seen by the Bentley Wood volunteer group while scrub clearing at the Draining Field Pond on 17th November. There were just a few records of note.

Nick Adams discovered **Beautiful Demoiselles** on the River Sem, not far from Shaftesbury and the most South-westerly record to date of this species.

**Downy Emeralds** had yet another good year in the Lower Moor Complex at the Cotswold Water Park; with a sheltered ride yielding roosting 'flocks' of a dozen or more [I managed to get 5 in one shot!]

Also at Lower Moor **Hairy Dragonflies** were seen at the education pond by visiting Northants odonatologists Judy and Terry Wood. Over several days they saw a female ovipositing, a male and female in tandem and patrolling males – a site to scrutinise carefully during May next year!!

**Scarce Chasers** re-appeared in the Caen Hill locks area of the Kennet and Avon Canal in Devizes. There were good numbers of youngsters maturing in the lush vegetation associated with a new woodland plantation next to the canal. Thanks to Phil Smith for the heads up! Also males were seen holding territory on the turning ponds. Still no proof of breeding though so we must still assume they are coming there from the not too distant River Avon.

Another uncommon Wiltshire species, **Golden-ringed Dragonfly**, was recorded at Landford Bog for the first time in many years on 21st June. Many thanks to Helen Rice for posting images of this superb female on



©Christophe Brochard

The Beautiful Demoiselle was discovered on the River Sern in 2016, the most south-westerly record of this species to date.

Facebook. Probably the most interesting and intriguing report however was from Sue Walker. She watched a 'darter' emerge from her garden pond in the middle of the Bentley Wood complex SE of Salisbury on 12th June. But the photo she posted on our Facebook group clearly shows a female **Keeled Skimmer**! On my suggestion she searched for, and found, an exuvia on moss at the edge of the butyl lined pond [not sphagnum moss]. Photos she sent also showed this to be Keeled Skimmer. So we have our first ever absolute proof of breeding for Wiltshire – but in a very atypical habitat! The nearest known breeding habitat is 12kms away at Landford Bog/Heath area. Sue will be watching her pond with even greater interest in 2017....

Finally I would just like to give my heartfelt thanks to all who have gone to the trouble of letting me know what they've seen out there this year! To view images and more details of what's been seen this year please visit our Facebook group at: <https://www.facebook.com/groups/441544116004916/>

#### North Hampshire – VC 12

David Murdoch

Sadly very little to report from 2016, partly a result of the poor weather in the first half of the year. A lot of fieldwork was done on Hazeley Heath, an acid heath

in the north-east close to the nationally important Warren Heath / Bramshill woodlands; it was disappointing to have 'only' a single record of **Brilliant Emerald** and three of **Small Red Damselfly**, but a year-list of 22 species is not bad. On the chalk, there were several records of **Golden-ringed Dragonflies** from the Test valley and our local stream, the Dever: I watched a female egg-laying in a riffle and even added it to our garden list. In the UK, this is mainly a species of acid streams; Hampshire appears unusual to have it on calcareous waters. Close by, a colony of **Red-eyed Damselflies** was found in a newly dug pond; this is a common enough species in the still waters of the north-east but not on the chalk.

North Hampshire still has many areas of good dragonfly habitat that are poorly covered, particularly along the Test and Itchen valleys. There are still no records of **Willow Emerald Damselflies** (now well established 20 miles away in Surrey), nor **Southern Damselfly**, of which there are strong colonies close by in South Hampshire, so please go exploring!

#### Kent – VC 15 & 16

John and Gill Brook

2016 in some respects was a bit disappointing for the numbers of dragonflies seen on the wing,



whereas on the other hand reasonable numbers of exuviae of our five rarer species were found.

Our year started with the **Large Red Damselfly** emerging on 14 April. Although seven exuviae of the **Southern Hawker** were found at our garden pond and 21 exuviae of the **Emperor Dragonfly**, only one male of each species was noted back at the pond. This may partly be due to the fact that we were probably out in the field looking for dragonflies! Later in the year very few **Migrant Hawkers** were seen in places where normally many would be seen together.

However, there was one highlight for us at home and this was the emergence of six **Black-tailed Skimmers** from our garden pond. This was an unexpected find as their breeding habitat is usually a larger waterbody such as a lake. Our pond is about 16 feet by 8 feet with a shallow end and has a depth of about 2 feet nearer the other end, with much submergent vegetation.

Our two known breeding sites for the **Norfolk Hawker** continue to do well. Nine exuviae were collected from one site but only one from the other site where it is more difficult to access the emergence areas.

The **Southern Migrant Hawker** continues to breed at one site on the North Kent Marshes and ten exuviae were collected from among the dense Sea Club Rush. At the same site about 20 exuviae of the **Southern Emerald Damselfly** were found. These two species require similar habitats and conditions in which to breed, which is also shared with the **Scarce Emerald Damselfly**.

The **Willow Emerald Damselfly** is expanding its range in Kent having been seen in four new locations. It was discovered breeding at a new site on the Isle of Thanet where many ovipositing scars were found on Goat Willow bushes, and pairs were seen ovipositing on 25 August. As yet no exuviae were found there.

The **Dainty Damselfly** is still maintaining its position on the Isle of Sheppey. Although only two adults were seen, probably due to the lateness of the visit in search of later species, a total of about 23 exuviae were collected from the known breeding sites. Unfortunately one of the sites looks rather vulnerable due to the abundance of Marsh Frogs.

#### Hertfordshire – VC 20

*Roy Woodward*

On 6th June an emerald dragonfly

*A newly emerged female Black-tailed Skimmer and her exuvia at John and Gill's garden pond, Kent.*



© John and Gill Brook

was seen briefly at Tyttenhanger Gravel Pits. The identification was confirmed the next day, when at least two male **Downy Emeralds** were photographed, with up to three males seen in subsequent days. Although this species occurs in neighbouring counties, there have previously only been a handful of records in Hertfordshire, with the only recent record being of one at West Hyde on 27th June 2010. Prior to this, the last record had been in 1956 when two were caught at Aldenham.

Following their rediscovery in the county during 2015, peak counts of 30+ **Scarce Emerald Damselflies** were made at Hertford Heath. It seems that they are now fairly well established at this site, although mainly restricted to a few temporary ponds. This year there were also a few found at Patmore Heath, so they are clearly worth looking out for elsewhere.

**Scarce Chasers** weren't seen at Amwell this year, but on 3rd July the species was found at the other side of the county on the Grand Union Canal at Wilstone. At least 8 males were found to be present, and a tandem pair was seen, suggesting that breeding may be taking place.

A male **Lesser Emperor** was seen at Amwell on 18th July, and at least two males were at Hilfield Park Reservoir at the end of the month, and a male **Norfolk Hawker** was at Amwell for a few days from 19th July.

Finally, after the first county records from Amwell and Balls Wood in 2014 and 2015 (both sites in each year), **Willow Emerald Damselflies** were reported from five new sites this year, mostly in the east, but also from Tyttenhanger Gravel Pits. It seems likely that they will be found at many more localities over the next few years.

#### Berkshire – VC 22

*Mike Turton*

The season got off to a slow start



© Stephen Burch

**Hairy Dragonfly at Otmoor RSPB Reserve, Oxfordshire on 6th June 2016.**

with many species emerging later than average. One of the exceptions was **Large Red Damselfly** with a record of 10 at Sonning on 20th April. **Beautiful Demoiselle** was the next species to be recorded with one being spotted on Fobney Island on the R. Kennet on 3rd May. This species continues to spread across Berkshire, with records from a number of unexpected locations. A number of the species which emerge in Spring appear to have had fairly short flight seasons, emerging later and finishing earlier than normal. This was particularly noticeable for **Broad-bodied Chaser** and **Downy Emerald**.

The **Common Clubtail** population on the River Thames continues to cause concern with just six reports from the VC22 side of the river. A single adult was recorded from Theale, again raising the possibility of a population being present on the River Kennet. Both rivers will form part of the national Common Clubtail survey being carried out by the BDS in 2017.

There were two reports of **Lesser Emperor** in the Kennet valley in July; two, possibly three, were reported from old gravel pits at Woolhampton followed by another record of a single adult at another lake nearby.

Having only arrived in VC22 in 2008, **Hairy Dragonfly** continues to do well with 10 reported from Thames Valley Park (Reading) as well as records from 12 other sites.

There were two very late records for **Golden-ringed Dragonfly** on 12th and 17th October; the latter at Streatley is an example of how widely this species disperses.

**White-legged Damselfly** seems to have disappeared from Decoy Heath with only two recorded in 2015 and none in 2016. However it continues to do well at nearby Paice's Wood.

Thank you to everyone who submitted records in 2016.

#### **Oxfordshire – VC 23** *Stephen Burch*

In VC23, 2016 was not a particularly notable year for dragonflies, with below average numbers, probably as a result of the mixed early and mid-season weather. It wasn't until 30 April that the first **Large Red Damselfly** was reported at RSPB Otmoor – the premier site for dragonflies in VC23. **Hairy Dragonflies** started to appear at the same site from early May, but numbers were well down on recent years. There was also a record of one from a new site – Culham Brake, near Abingdon.

One of only three adult **Common Clubtail** records also came from that site, with the other two being from their traditional site of Goring Railway Bridge, where two were seen emerging on different dates. Good numbers of exuviae were also found here on 23rd and 26th May, but only one remained by the 28th.

It was also apparently a poor year for **White-legged Damselflies**,

with just one record, again well down on 2015. Towards the end of the season, conditions improved somewhat and there were good numbers of **Southern, Brown** and **Migrant Hawkers** seen. As has often been the case in recent years, the season continued into November, with the last record being of a **Common Darter** on 13 November.

In all, about 140 records of 20 species were received this year for VC 23, which is a similar total and the same number of species as seen last year. Further details can be found online at <http://www.stephenburch.com/dragonflies/OxonDragons.htm>

#### **Suffolk - VC25 & 26** *Adrian Parr*

The new local Atlas (Suffolk Dragonflies by Nick Mason & Adrian Parr) was published during early 2016 and recording in the county suffered something of a post-Atlas reduction in intensity. It did, however, appear to genuinely be a relatively low-key year in 2016, though there were still a few highlights.

**Scarce Chaser** continued to show signs of range expansion within

**Lesser Emperors made an appearance in both Berkshire and Suffolk in 2016.**



© Christophe Brochard



the county, a record of a territorial male on the River Stour near Great Wratting being a new 10km square record and the furthest upstream that the species has ever been recorded on the Stour. An immature found in woodland on the edge of Newmarket, many miles from suitable breeding habitat, was also of some note, though sadly it was just a hundred metres over the county boundary into Cambridgeshire!

Two **Lesser Emperor** were noted in the southeast of the county during the course of the year, one at Loompit Lake near Felixstowe during mid July and the other not too far away at Bawdsey during late August. Both individuals stayed around for a few days, allowing several local enthusiasts to catch up with the species.

On the downside, rather few reports of **White-legged Damselfly** were received during 2016. The full significance of this is however unclear, given the species' rather localised distribution within the county, and with the season's reduction in recording effort.

### Norfolk - VC 27 and 28

*Pam Taylor*

Apologies if I've omitted something this year, but at the time of writing I still have a severe backlog of records to check on iRecord. I will get there! Thankfully for now, many of

my key observers still send me records on spreadsheets or at least alert me to special finds, so I can report some news.

The most outstanding migrant this year was a female **Vagrant Emperor** photographed at Gun Hill on the north Norfolk coast on 25th October. The finder, Robin Chitterden, was after a desert wheatear at the time and he only realised days later what he had actually photographed when distracted by the dragonfly.

During late July **Lesser Emperor** appeared at the Trinity Broads for at least the third year in succession. This is suggestive of a small colony having established. A single seen in Gorleston earlier in the month is more likely to have been a fresh migrant.

In mid-August Winterton Dunes produced a single record of male **Southern Emerald Damselfly**. This follows a female seen there in 2015 and regular records since the species was first found at Winterton in 2002. The 2016 record coincided with the arrival of three male **Keeled Skimmers** that were presumed to be migrants. A month earlier a single **Beautiful Demoiselle** was reported from North Walsham. This species is not resident in the county.

The single colony of **Scarce Blue-tailed Damselflies** in Norfolk were reported to have had a

good year, with several orange aurantiaca females seen in both May and June. The breeding site is on private land near the east coast. Another species whose status is unclear in the county is **Red-veined Darter**. In 2016 there were records from Beeston Common, Kelling Water Meadows (a regular site) and Titchwell.

Overall 2016 was a quiet year for Norfolk. The long cool spring and early summer depressed dragonfly numbers considerably and it was mid-July before things returned to normal.

### Cambridgeshire and Huntingdonshire – VC 29 & 31

*Val Perrin*

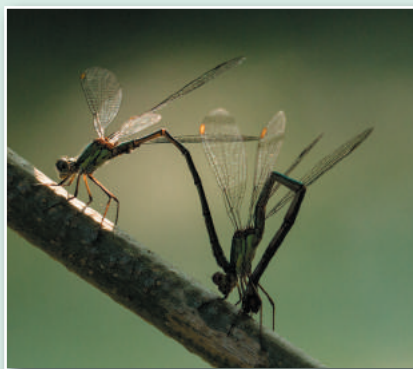
The principal highlight of our dragonfly year in 2016 has been the consolidation and spread of **Willow Emerald Damselfly** in the county. From our first reported sighting in September 2014 at Roswell Pits NR near Ely, 2015 saw records of single individuals in Over, at two locations in Cambridge and an unsubstantiated record of up to 10 being seen back at Roswell Pits.

Last year (2016), recorded sightings really jumped in late summer. However, one keen observer did some winter homework by finding and photographing oviposition scars on crack willow and ash twigs overhanging water at Roswell Pits. The first adult damselfly sightings came in August, with between one and five insects being recorded at Roswell Pits in the latter half of the month and a new record coming from Cambridge Botanic Garden on 26th August.

From the north of the county a male Willow Emerald was observed at Kings Dyke, Whittlesey on 29th, while at least 8 pairs in tandem and ovipositing, with other males nearby, were clearly visible on two separate dates in September on a large ash tree overhanging water at Quy Water, opposite Anglesey Abbey National Trust property. One could again see the

An immature female (aurantiaca form) Scarce Blue-tailed Damselfly.  
This species continues to be found at its only Norfolk site.





Ovipositing Willow Emerald Damselflies at Quy Water, Cambridgeshire in 2016.

paired oviposition scars through binoculars. Around 18 of these damselflies were still active at this location by mid-October.

Other records also came in from nearby Quy Fen and East Barnwell NR in Cambridge, whilst a further two new locations harbouring 1-2 individuals or pairs were reported from the Old River Nene at March (9th October) and a pond at the Froglife reserve at Hampton Peterborough (28th September).

The final records I heard about were from one of my recorders who had around a dozen on her garden pond between mid-September and mid-October at Cardinal's Green, Horseheath in the south-east of the county.

Most of these new records were also supported by photographic evidence, so it appears that Cambridgeshire has become another stronghold in the western and southern spread of this species. I firmly predict to be receiving even more records in late summer this year!

Elsewhere we've had a steady return of records of other species, although there are many gaps in the up to date knowledge of some key species (e.g. **Norfolk Hawker**).

#### Bedfordshire - VC30

Rory Morrissey

Bedfordshire recorded the usual 21 resident species this year, plus a possible new resident, with several sightings of **Willow Emerald Damselfly**. The first

male was seen at Flitton Moor on 7 September. Only one record of a pair in tandem and possibly ovipositing was noted, this taking place at Duck End NR near Maulden on 23 September. Five days earlier, six males had been seen there.

It seemed to be a reasonably good year for most odonata in the county, but poor weather and a reduction in observer effort contributed to an overall drop in records of most species. The least often reported species in Bedfordshire (excepting Willow Emerald Damselfly) were **Scarce Chaser** and **Downy Emerald**, which are only known from small areas at different ends of the county. Scarce Chaser can be found on the River Great Ouse near Roxton in the north-east and Downy Emerald at lakes near Heath and Reach in the south-west of the county. The most commonly recorded species was **Common Blue Damselfly**.

No vagrant or migrant species were noted in Bedfordshire this year.

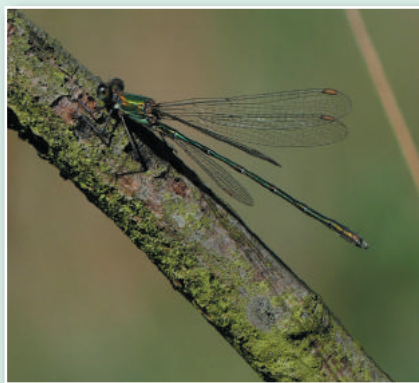
#### Northamptonshire – VC 32

Mark Tyrrell

A fairly typical year was seen in 2016, until August when things got much more exciting. April saw the first **Large Red Damselflies** and during the rest of the year every species appeared to schedule.

I had another project underway photographing a heronry where a group of Little Egrets had moved in to nest at Kinewell

#### A Willow Emerald Damselfly at Flitton Moor, Bedfordshire.



Lake, Ringstead. I have never actually recorded dragonflies here because the former gravel pit does not at first glance appear a great site, with little in the way of emergent vegetation and is almost completely surrounded on the perimeter by trees shading the margins. Neighbouring gravel pits are much more open and better sites. However while watching the young Herons and Egrets, I became aware of literally tens of thousands of **Common Blue Damselflies**, which puts it at the top of the league table for this species in Northants – the moral being don't neglect sites just because they don't at first appear ideal.

**Scarce Chasers** began showing up in unusual places, far from their typical territories on the Nene, at Lyveden New Bield, Fineshade Wood and Fermyn Woods Country park. Signs of new colonies or just wandering adults?

A single **Variable Damselfly** was found at the Greenway, Irthlingborough which prompted further searches of the area for an as yet undiscovered colony in non-public areas of this site. The **Beautiful Demoiselle** continues to maintain a presence on the northern stretches of the River Nene Brampton Valley Way, which is a strong sign that they are well established in this area, despite breeding not being firmly established.

In August I received a call from Trisha Thompson who had located a male **Willow Emerald Damselfly** at Boardwalks Country Park near Peterborough (within VC32). This sighting fitted in well with other new records in neighbouring counties. Further recording found a total of four adults. In early September, I then located another male at a different site in the heart of the county, and a total of two adults were seen before the season ended. Of greater excitement was the discovery of several branches of willow with ovipositing scars – I counted a total of over 150 eggs across four different branches. I





© Mark Tyrrell

### Willow Emerald Damselfly oviposition (egg-laying) scars, in Northamptonshire, 2016.

now look forward to July/August 2017 with great excitement to add a new species to the County breeding list.

### Gloucestershire – VC 33 & 34 *Ingrid Twissell*

There were a few sightings of **Scarce Blue-tailed Damselfly**, the first being on 16th May at Western Approaches, South Gloucestershire, with a further two on 24th May. A single male was at Woorgreens pondscape, Crabtree Hill, on 24th June, this being a site where breeding had previously been recorded. At least three were discovered at a new site on 10th July, at Stowe Quarry, also in the Forest of Dean.

**Small Red-eyed Damselfly** had a good year at Western Approaches where approx 30 were recorded on 5th July. Several were first seen on 8th August, then widespread throughout The Mythe fishing lakes, its main stronghold, on 15th August. It was also present at Coombe Hill Canal on 27th July, when at least a single adult was recorded.

Sightings for **Hairy Dragonfly** occurred at Western Approaches, when a maximum of three were recorded on one day between 16th May and 10th June. At their stronghold at WWT Slimbridge the first sightings were on 12th May, but with a maximum of three through to June when the days were warm enough, the season

was very poor.

**Common Clubtail** was recorded at two locations on the River Severn when a single male flew into the top of a tree at The Mythe on 29th May, with a single male also recorded on 30th June. The other River Severn location at Apperley was visited three times during June: on 5th June, two males and a probable third, including one male photographed eating a **White-legged Damselfly**, on 17th June a single male was recorded and on 24th June a mature male was present. On the River Wye at Symonds Yat a single male was photographed on 7th June; this is an area where they are regularly seen.

There was a sighting of a male **Downy Emerald** patrolling at a fishing pool at Newent Woods near May Hill on 6th June, an unusual one and a first record for that location, being somewhat distant from other more usual sites. The only other records were of a male in the Cinderford Linear Park-South on 8th June, and approx five at Lightmoor Ponds on 24th June in the Forest of Dean.

**Scarce Chaser** was first seen at a new location near Ashleworth Quay, near Tewkesbury, on 22nd May, when a female was photographed. The first sighting at The Mythe was on 27th May, with 14 present on 29th May, a further two on 11th June, and

more than six including a mating pair on 24th June. At Apperley a single male was present on 5th June. Three males were recorded on 21st June at Twynning, on the River Avon; this year seemed to be poor here, but maybe we missed visiting in the peak of the season. At Coombe Hill Canal an unmated male was present on 6th June, with a possible male sighting on 9th June.

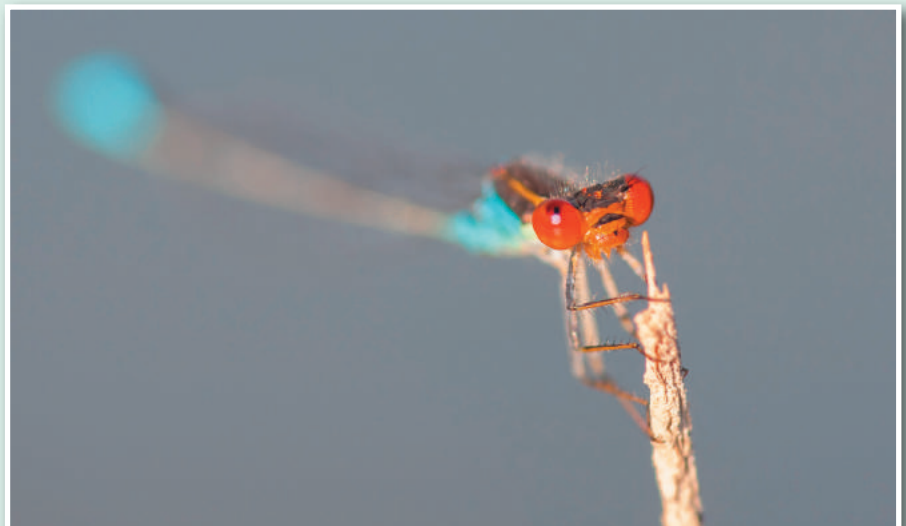
The only sighting of **Keeled Skimmer** was at Bilson Green ponds, Forest of Dean, on 2nd July, when a very immature/ teneral insect was recorded. This was a new location for this rarely seen dragonfly. Another rarely seen dragonfly, **Black Darter**, was recorded at The Park, Tidenham, in August; the only record received for 2016. **Red-veined Darter** was recorded at Western Approaches from 23rd June until 22nd September, with only singles seen on each of the four occasions when a visit took place.

All in all, the sightings I received seemed to indicate a quiet year. The publication of "Dragonflies and Damselflies of Gloucestershire" in April 2016 has sold well, with a further print run necessary in October.

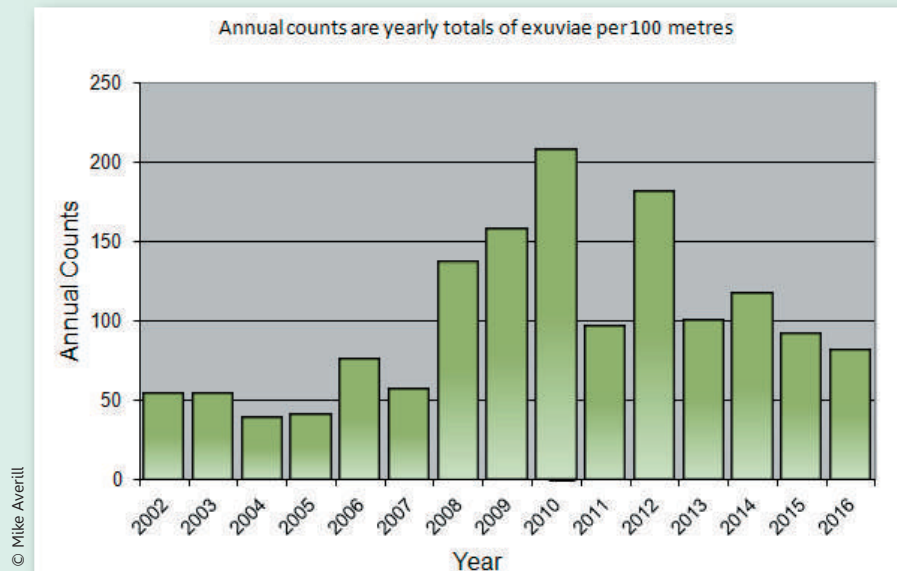
### Worcestershire – VC 37 *Mike Averill*

A cool spring made most dragonflies up to two weeks late emerging in 2016, the only

### Small Red-eyed Damselflies had a good year in Gloucestershire in 2016



© Christophe Brochard



Comparing 2016 emergence numbers of the Common Clubtail at Bewdley with annual totals from the previous 14 years.

exception to that was the **White-legged Damselfly** which was seen very early and there may be a reason for that. The species is essentially a river damselfly but they can be found on pools and lakes in some locations and this may well mean that they emerge earlier than their river cousins as the water is likely to warm up more quickly.

In all 24 species were recorded this year from a possible 29 and included two that are only occasionally seen, the inappropriately named **Common Hawker** and the **Black Darter**. The **Scarce Chaser** has now consolidated its position on the River Avon but it looks like its five year run at breeding on a pool at Hartlebury is coming to an end as only one rubbed male was seen. Perhaps reflecting the increased number of **Four-spotted Chaser** sightings seen nowadays, it was not to be long before the form of the Four-spotted Chaser, *praenubila* was seen.

With the up-coming survey and increased interest in the **Common Clubtail**, it would be useful to see what its status is compared to previous years, especially as there are concerns about its status elsewhere in the country. Worcestershire has arguably one of the largest populations of this species in the country (in terms of 1km squares occupied). First

noticed in the county in 1900, this species has probably had its ups and downs and it looks like it is at a low point at the moment. Once quite common on the River Avon in the 1980's and 1990's it is now quite hard to find. There are no real water quality concerns as the Scarce Chaser has moved in to this area and is doing quite well. It also seems to be retreating from the mid reaches of the River Teme as well. Fortunately there has been a long running count at Bewdley for 30 years now which helps understand the annual changes that take place, if not the reasons why. Taking the last 16 years for instance, although emergence rates are not as low as in 2004, this year was the lowest for 10 years. Whatever the reason, further counts will help us decipher the trends and analysis is planned on water temperature data to try to identify if there have been any changes in local climate conditions which may have impacted on the life-cycle.

### Warwickshire – VC 38

*Kay and Peter Reeve*

For the second year running there was a slow start to the flight season. The first sightings of adults of many species were quite late. It was not until mid-June that all our known breeding species were on the wing. Some early species appeared quite late. For

example, the first flying **Broad-bodied Chaser** was seen on 17th May, five weeks later than our earliest ever date for the county of 12th April.

However, there were a number of new proof of breeding at sites in the county. Exuviae of **Hairy Dragonfly** were found at Wormleighton Reservoir in the south-east and Alvecote Wood in the north of the county. At both sites adults have been seen for several years. This species is now present at thirteen sites that are widely distributed in Warwickshire with breeding proved at four (i.e. exuvia and/or emerging adults seen).

For several years **Scarce Chaser** has been found flying and showing breeding behaviour on the Avon at Marlcliff. This year, for the first time anywhere in the county, an exuvia and a preflight adult were found – the latter, sadly, had been mortally wounded by some form of predation.

By the end of June all our resident breeding species were seen on the wing – including a sighting of the county rarity **Scarce Blue-tailed Damselfly** which is still holding on at its one vulnerable site.

We had a rarely seen vagrant, **Black Darter**, at Alvecote in the north of the county (a site with highly acidic pools but devoid of sphagnum). It was last seen in the county in 2012.

Finally, Jill Roberts photographed

[A Hairy Dragonfly exuvia at Wormleighton, Warwickshire](#)





a **Black-tailed Skimmer** at Winderton on 29th September, a very late date for the species and the latest for it flying in Warwickshire. Further, it still showed immature coloration through blue pruinescence at several places on the abdomen - this suggests it was fairly young. Not content with just a male, she saw a female too and watched the two mating.

### Staffordshire – VC 39

*Dave Jackson*

In Staffordshire, the colony of **Black Darters** still persists at Womere Pool on Cannock Chase; several were observed in the summer. A small colony of **Red-eyed Damselflies** was also confirmed on the fishing pool at Baggeridge Country Park. The **White-faced Darters** at Chartley Moss continue to fare well with even greater numbers counted in 2016 compared to 2015.

### Shropshire – VC 40

*Sue McLamb*

The summer of 2016 saw a total of 28 species recorded comprising 17 dragonfly and 11 damselfly species. There were seasonal highs and lows with the first ever Shropshire record of **Lesser Emperor** made by P. Hope on 20th June followed by an unusual and frustrating lack of damselflies in mid to late summer.

The flight season presented a 'mixed bag' with species flying both earlier and later than expected. One of the earliest sightings of **Common Darter** was made by S. Townsend at Whixall Moss on 28th May and surprisingly the latest ever records for **Common Hawker** and **Black Darter** were also made at Whixall Moss by S. Barlow - both on 31st October. There were also 2 bizarre records of **Golden-ringed Dragonfly** in seemingly unsuitable locations: 1 confirmed at Severn Valley Country Park and the other (unconfirmed) on the River Onny - all the more interesting with Oxford apparently witnessing similar oddities.

Despite it being a tricky season we had an excellent increase in recorders with over 90 people keeping an eye on all things dragonfly and gathering over 800 records. This interest may be due to an increasing number (now 21%) of people submitting records through iRecord. It may also be linked to the launch of the Shropshire Dragonflies Website which finally went live in April 2016. The popular flight season blog can now be found on this website along with a host of information on local species, events, habitats etc.....definitely worth a look!  
<http://shropshiredragonflies.co.uk>

A far greater proportion of the records received in 2016 were exuvial which is great news. This is largely due to Dave Tompkins and Genevieve Dalley coordinating a survey on **Common Clubtail**. This led to around 50 Shropshire records of this species - a marked improvement on the 4 records of 2015. Surveyors also submitted a number of exuvial records of other species such as **White-legged Damselfly** and **Banded Demoiselle**. The good news is that Clubtail Count 2017 has already been launched with lots of opportunities to get involved: full details on the Shropshire Dragonflies website.

Records of Golden-ringed Dragonflies in unusual places was a theme of 2016, including in Shropshire.

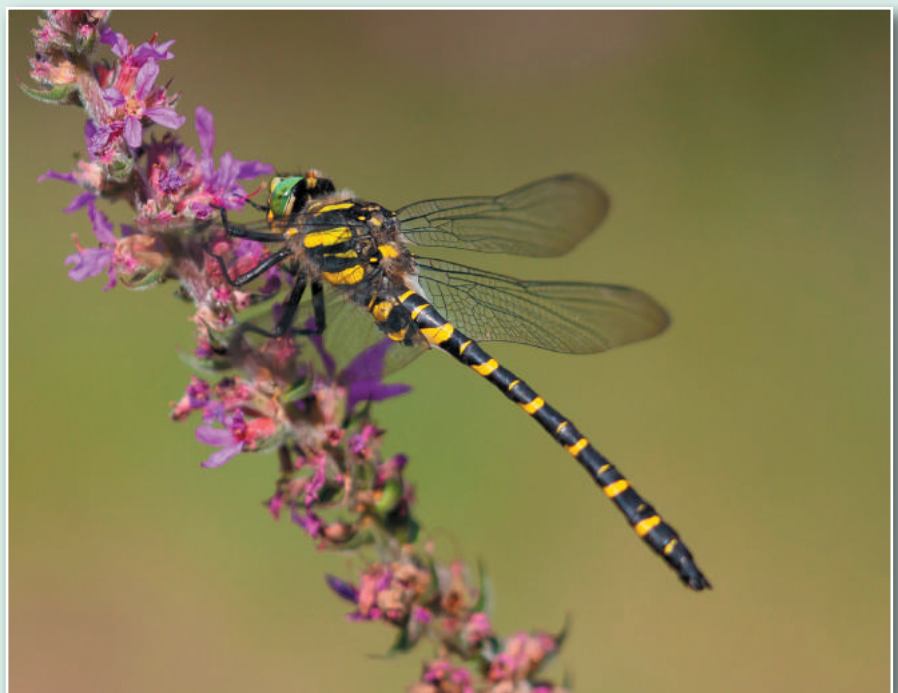
### Breconshire - VC 42

*Keith Noble*

The earliest sighting was of **Large Red Damselfly** on 5th May at Sarnau Ponds north of Brecon where Mike Tompkinson recorded first dates of a respectable eleven breeding species and two visitors. By mid-month hundreds of **Variable** and **Common Blue Damselflies** were out at Llangorse Lake; two **Hairy Dragonflies** were noted there on 31st and another on 12th June. At Brechfa Pool four male **Black-tailed Skimmers** were present with many Common Blue Damselflies in June, followed by breeding **Common Darters** from August into October.

The Breconshire banks of the Wye have not received the attention given to the Radnorshire side, so a visit to The Warren at Hay-on-Wye was useful. Ten **White-legged Damselflies**, a species only previously recorded nearby in 1992, were present with about fifty **Banded Demoiselles**. There are no Breconshire records yet of **Common Clubtail** which does occur across the river, a situation which I hope the 2017 survey will change.

Only one unproductive visit to the important site of Mynnydd



Illtyd was reported. Not far south of here Mark Waldron found five species in the Tarrell valley. At Ystradfawr, one of Brecknock Wildlife Trust's reserves in its upper Tawe valley community project, Chris Jones reported a **Keeled Skimmer** and four other species. The highest count of **Migrant Hawkers** at Llangorse Lake was of 32 in late September and the last one was seen on 30th October.

I continued to send occasional emailed news and pictures to about 50 people, and produced a display of photos and maps for the 15th birthday celebration of BIS, our Local Records Centre.

### North Wales – VC 48 to 52

Allan Brandon

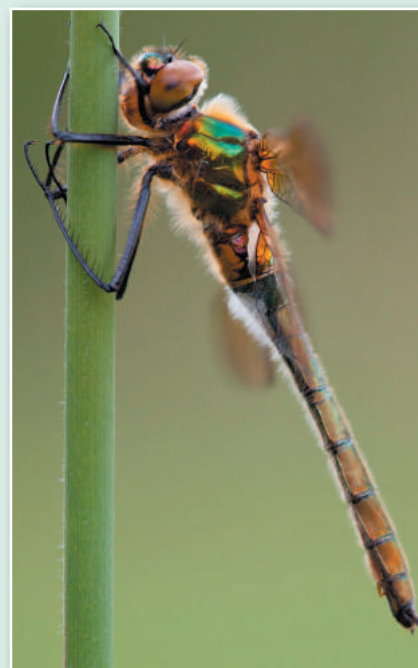
The first sightings of flying odonates came in rather late last year. Not until the 22nd April did Duncan Brown report and photograph a female **Large Red Damselfly** near Castellmai, Caeathro, the same day I recorded my first sighting of a teneral at my garden pond in Rowen in the Conwy valley.

The team on Bardsey are excellent at picking up migrants. Photos of a female **Red-veined Darter**

were taken on the 11th May by Steve Stansfield, warden at the bird observatory on the island. This follows on from Robin Sandham's photographic record of a male on the 18th June 2015 and Steve Stansfield's fine male **Vagrant Emperor** there on the 1st November that year.

**Downy Emerald** is still doing well at Llyn Tecwyn Isaf, one of our best North Walean dragonfly sites with many species. Dick Eastwood visited there on the 15th May and was rewarded with two emergent Downy Emerald larvae crawling 10 feet up a birch trunk at the lake's margin. He also flushed seven adults from the grassland. Dylan Edwards also made a visit to the lake on the 31st May and saw at least six Downy Emerald adults. Dick was back there on the 5th June and found Downy Emerald on all sides of the lake and numerous **Hairy Dragonfly** including oviposition.

One of the highlights of the year was Sue Loose's discovery of **Scarce Blue-tail Damselfly** on the 6th June at the old Minera limestone quarry workings west of Wrexham. The site is now a nature reserve. She photographed an immature (aurantiaca phase) female at a shallow pool. Steve

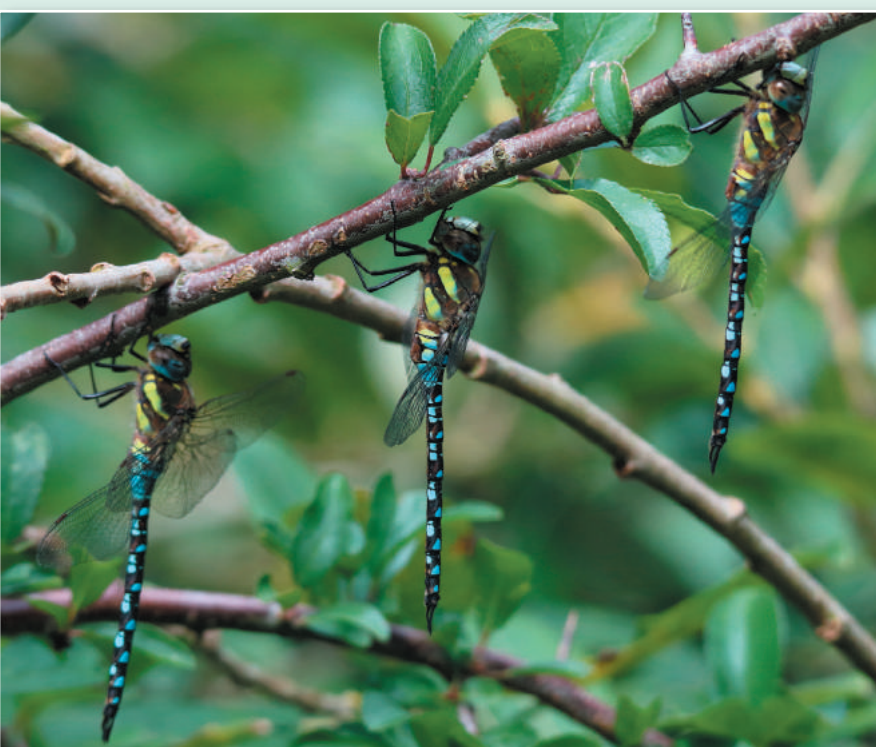


© Christophe Brochard

Downy Emerald was still doing well at Llyn Tecwyn Isaf, North Wales in 2016.

Palin found a male at the same pool on the 16th June and a revisit by Sue on the 21st July turned up three mature males and a mature female. She suggests there is probably a healthy population there. This is marvellous news for North Wales as, apart from a single uncorroborated record from Fenns Moss (10th July 2009 by Estelle Hughes), the species has never been recorded before east of the three known Snowdonia sites. The species is apparently missing from Cheshire and there is only a single historic record (1969) from nearby Whixall Moss, Shropshire. Sue's find opens up a new area of exploration for the species and it would be good to find other sites with pumilio in the area, so far removed from any previously known colonies. The Lafarge Company currently owns the site and permission must be obtained to enter the quarry.

We also get very few records of **Red-eyed Damselfly** from the North Wales region, and all are from the extreme east. Sue Loose picked it up at Redwither pond [SJ385501] on the Wrexham Industrial Estate on the 24th July 2016, this being a new locality for the species. She observed a minimum of three males and



© Brian Baird

A trio of Migrant Hawkers at Llangorse Lake, Breconshire, in 2016.



possibly a pair in tandem. She states that this new site for the species is relatively close to Llay Pool, to the north of Wrexham, where it had previously been recorded in recent years by Steve Palin but is not a common species in the area yet.

### Lincolnshire – VC 53 & 54

*Nick Tribe*

2016 was an extraordinary year as records for a species not seen in the county for 99 years and a new colonist were received.

Kevin Du Rose found **Scarce Chaser** adult males on 21st June in southern Lincolnshire on the New South Eau and the North Level Main Drain, both sites being on the Lincolnshire/Cambridgeshire border. The only previous records were of two individuals seen near Lincoln in 1917.

Trish Thompson found **Willow Emerald Damselfly** at Baston Fen Lincolnshire Wildlife Trust (LWT) reserve on 11th September. Two males and a female (and possibly a second female) were observed. Oviposition was also seen. Individuals were seen here until 3rd October. Chris and Sue Bottomer then found two males of this species at Gibraltar Point NNR on 18th September. They are believed to be the most northerly

records of this species in Britain to date.

Both **Scarce Chaser** and **Willow Emerald Damselfly** were predicted to (re-)colonise the county but to have both in a year was not expected.

A **Lesser Emperor** larva was recorded from the River Glen at Tongue End on 16th May by Alex Pickwell of the Environment Agency.

A joint British Dragonfly Society/Lincolnshire Naturalists' Union field meeting at Stanton's Pit LWT reserve on 17th July produced no fewer than 13 species including both **Red-eyed Damselfly** and **Small Red-eyed Damselfly**. Previously 9 species had been recorded from this site.

### Leicestershire & Rutland – VC 55

*Ian Merrill*

In my 2014 update I was excited to report the apparent extension of the range of the **Scarce Chaser** into VC55, along the River Welland on the south-eastern border of the counties. Subsequently, 2015 was all very quiet and no further records were received; was the presumed expansion just a false alarm raised by an unusual dispersal from the south? In light of this

lull, who could have predicted that multiple records of **Scarce Chaser** would be recorded close to the northern boundary of Leicestershire in 2016? Such is the unpredictability of dragonfly recording in our rapidly changing environment!

In early July 2016 three separate **Scarce Chasers** were recorded on the River Soar between Kegworth and the River Trent, including the first ever record of a female in VC55; Steve Mathers had the accolade of first discovering **Scarce Chaser** at this site. Although such a 'jump', across the whole of Leicestershire, seems unlikely, the presence of a new colony must be strongly suspected and it will be very interesting to see how the situation pans out in 2017. I would urge recorders in VC55 and also neighbouring areas of both Nottinghamshire and Derbyshire to search suitable habitats in the vicinity of the 2016 records and hopefully help to paint a clearer picture, with regard to the mysterious distribution of the **Scarce Chaser** in this region.

The other exciting find of 2016 was that of an apparent second North West Leicestershire colony of **Common Hawkers**, by Matthew Billings; this species was previously only known as a breeding species at New Lount Nature Reserve. The site of the new discovery was the Leicestershire & Rutland Wildlife Trust's Charnwood Lodge Nature Reserve where, in August, three separate females were observed and ovipositing was recorded. Once again, 2017 observations at this site will hopefully prove to be very interesting.

### Cheshire – VC 58

*David Kitching*

The last year was disappointing with extended cool and poor weather leading to low numbers of most species seen and no great surprises. Although only **Large Red Damselflies** were seen in April, **Downy Emerald** were flying in early May at Gull Pool and these were soon followed by **Red-**

*Scarce Chaser was recorded in Lincolnshire for the first time in 99 years in 2016.*



**eyed Damselfly** at Maw Green near Crewe and **Hairy Dragonfly** at Curton. **Common Clubtail** were recorded at several locations on the River Dee including Aldford and Farndon but only in the last week of May and first week of June.

In 2015 no records of **Beautiful Demoiselle** were made but this year Neil Friswell found several along the Forge Brook in South Cheshire near Wybunbury. I am sure that this species is significantly under-recorded in Cheshire as it occurs in difficult to access locations well away from the centres of population. It would make an interesting project for someone to target this species for a year or two. The **White-legged Damselfly** is not easy to find in the county as it occurs in very low numbers and can easily be overlooked. Only one record was received from Neil Friswell who found it at Crewe-by-Farndon on the Dee.

One species that seems to be doing well is the **Black-tailed Skimmer** which has steadily established itself as a breeding species right across from the coast on the Wirral up to the hills of East Cheshire. The two males at Cheshire's Close near to the Staffordshire border provided a new 10km square record in the uplands. It had a flight period in

the county of 3½ months. The colony of **Small Red-eyed Damselfly** at Warmingham Flash near Sandbach continued to thrive and I would expect it to be found at other suitable habitat in forthcoming years. It was only seen mid-July to mid-August. There were no records submitted for **Golden-ringed Dragonfly** although an adult was seen near Buxton, close to the boundary.

The final total of species seen during the year was 25.

Details by month with photographs can be found on the Cheshire Odonata website at [www.brocross.com/dfly/dfly.htm](http://www.brocross.com/dfly/dfly.htm)

### **South-east Yorkshire – VC61** *Martin Roberts*

My first season as VC61 recorder started slowly with the first **Large Red Damselflies** not reported until 6 May, three weeks after this species was reported just over the border in NE Yorkshire.

After that, activity increased and by the end of May six species of damselfly and four species of dragonfly were on the wing, including five **Red-veined Darters** seen on 27 May around Clubley's Scrape on Spurn. This was the only record of the species in 2016, compared to sightings at five locations in 2015.



© Christophe Brochard

### **A particularly late Common Blue Damselfly was found in South-east Yorkshire on 6th October 2016**

By the end of June a further two species of damselfly and five species of dragonfly had joined the party. July brought three more species of dragonfly and in August **Small Red-eyed Damselfly** and **Migrant Hawker** finally arrived, bringing the total number of species for the year to nine damselflies and 13 dragonflies, which is about normal for this area. The least often recorded of our regular species were **Hairy Dragonfly** and **Small Red-eyed Damselfly**, with just two records of each.

At the end of the season, Migrant Hawkers and **Common Darters** remained frequent and widespread until early November. Of particular note is a late record of **Common Blue Damselfly** at North Cave Wetlands on 6 October.

In total, 402 records were submitted in 2016 compared to 82 in 2015 when iRecord was just starting to be adopted by our recorders.

The transfer of iRecord verifier status from my predecessor suffered some IT-related difficulties and it is possible that some early-season records were lost as a consequence. The guys at BRC were very helpful and verification now appears to be working satisfactorily, although

### **A mating pair of Black-tailed Skimmer at Hatchmere, Cheshire in 2016.**



© Brian Baird



an anomaly regarding the name of the actual verifier remains unresolved.

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

*Keith Gittens*

Red-eyed Damselflies continue to dominate the news. In August 2014 a male **Small Red-eyed Damselfly** had been spotted on a pond on Strensall Common near York. With no records in 2015 it was taken as being a lone wanderer. However in 2016 evidence of breeding was found with cop pairs and oviposition being seen at the same pond complex on three separate occasions. These ponds must now be considered the most northerly site where both species of Red-eye breed in Britain.

Three pond complexes across VC62 and 65 have been given Flagship pond status by the Freshwater Habitats Trust, all good sites for a wide variety of dragonflies. Strensall Common is one of these and the part of the site which holds the Red-eyes has been in danger of disappearing under a sea of Birch scrub, shading out heathland and the ponds. Fortunately a joint collaboration spearheaded by FHT and the local conservation volunteers group of Butterfly Conservation have come to the rescue with a series of workdays organised to clear the scrub with members of the BDS/Yorkshire Dragonfly Group doing their bit. It is down to recording effort at this site that has identified the ecological value of the area not only for dragonflies but a wide variety of flora and fauna and helped to stimulate the current management. Three cheers to all involved.

Otherwise it was a slow start to the year and numbers recorded were limited but the latter half of the season proved more productive with a few records in to November.

### Westmorland and Cumberland – VC 69 & 70

*David Clarke*

A strange year, with record flood events countywide in late 2015 compounding later weather effects. A few fine days in mid-month in April brought some emergence of **Large Red Damselflies** at Bowness-on-Solway, though the return of 'winter' temperatures for the rest of the month must surely have made this an abortive event. As it was, April was an especially cold month, even followed by a significant frost in early May, so there was a delayed start to the early part of the season. Apart from some fine and very warm weather in June, the remainder of the year was generally poor, with some species showing little and disappearing early – **Emerald Damselfly** in particular. The relatively low number of records received reflects this.

It was good to find that despite some severe bank erosion, and deposition of debris, this had had little obvious effect on **Banded Demoiselles** on the River Eden, where their numbers seemed similar to previous years. The species continued its presence on the West Cumbria Derwent (NY13), with new discoveries further downstream than previously recorded, at Curwen park, Workington (NY02). A September sighting (late for this area) of an apparent male **Beautiful Demoiselle** on the Derwent has raised the interesting possibility that the species might also be present on this system – a challenge for 2017.

Also amongst damselflies, visits to its single surviving colony in the county in June did at least confirm that **Variable Damselfly** continues to be present (NY00), and indeed is the predominant Coenagrion species; larvae found a little later in the season were quite large, though with small wing buds, suggesting the expected 2-year cycle is the case. The potential effects of the Moorside Nuclear Power Station development on this vulnerable,

and small, colony have yet to be resolved.

June produced an immature male **Broad-bodied Chaser** near Gamblesby (NY63) in the Eden valley on 9th, and a mature male was present for several days not far away a month later, at Kirkoswald (NY54). Whether these herald a further move north by this species remains to be seen: it is well-established in the south of the county. A **Black-tailed Skimmer** on 14th July at Millom (SD17) was the only record of this potential colonist, which so far has mainly been seen at a few coastal sites in recent years. Amongst established species, a **Downy Emerald** exuvia at Wharton Tarn (SD39) revealed an unrecorded breeding site for this species. In the eastern Lake District, **Keeled Skimmer** was seen breeding at 270m in Swindale (NY51), an interestingly high altitude for this species, which may be responding to a warming climate.

**Migrant Hawkers** in late season from the Siddick Ponds area, West Cumbria (NY03) are becoming an annual feature, though as the few seen were from dates in September/October it is questionable whether the species is breeding here. The Solway area yielded equally sparse records. Fortunately for the **White-faced Darter**, the best weather of 2016 coincided well with its flight period. This will undoubtedly have helped to ensure that the 2000+ emergers at the Foulshaw Moss re-introduction site (SD48)

**A Broad-bodied Chaser at Kirkoswald, Cumbria, 7th July 2016.**



will have had ample breeding opportunities. The numbers there seem to confirm it is already breeding well anyway. The donor site population (in NY46) also yielded good numbers, and a report from Claife Heights, Windermere has given us a new target area to look at for the source of small numbers still occurring in that huge area.

### Scotland VC72 – 112

Pat Batty

The warm spring weather in 2016, particularly in the west, led to emergence of **Large Red** and **Blue-tailed Damselflies** by early May and the **Hairy Dragonfly** on the 24th May.

The Scottish recorders are looking at priority species and sites to update records and to get breeding information.

The earliest records for **Azure Hawker** were 30th May, exuviae at Bridge of Grudie, and 31st May, adult in Glen Lyon. The species was recorded from various sites in the North West, a larva at Loch a'Mhuillinn and adults at Slattadale (2nd June), at Beinn Eighe, Glen Clavaearron near Ullapool and at Loch Arkaig. A larva was found at last! at Silver Flowes in Dumfries and Galloway, the first seen for many years despite days of searching. There has been only the occasional sighting of an

adult here in a handful of years since 2000.

Fit and enthusiastic volunteers continued surveying the bog pools on the hills between Glen Affric and Glen Morriston, larvae of the Azure Hawker were found in many more bog pools, thus making this the most extensive breeding area recorded in Scotland.

At the Bridge of Grudie on 30th May an emerging **Northern Emerald** was attacked by a **Four-spotted Chaser** on its first flight. Northern Emerald was also recorded from Slattadale in Wester Ross, Morven, Argyll and

at Strath Mashie, Easterness.

First emergence recorded for the **White-faced Darter** was 27th May. Breeding evidence was found at Silver Lochs, Bridge of Grudie and at Corrimony and Coire Loch in the Glen Affric area. Exuviae were found at a number of sites extending our knowledge of the distribution of this species in Glen Affric. Breeding has now also been proved from Glen Lossie in Moray with a large number of exuviae found here.

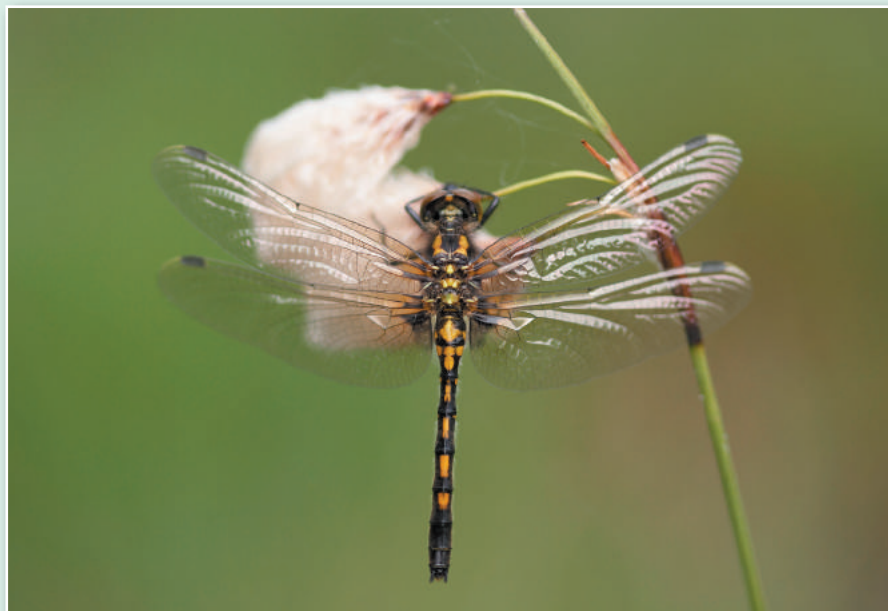
Further breeding records were obtained for the **Brilliant Emerald** at Loch Bran, Lochan na Deala, and other lochs in this area including the Dubh loch at Inverfarigaig.

Breeding evidence of White-faced Darters was found at a number of new sites in Scotland in 2016.



Azure Hawkers were recorded from various sites across Scotland in 2016, including at Silver Flowes.

©Christophe Brochard



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Two additional Brilliant Emerald breeding sites were also found at hill lochs to the west of Loch Awe. On the 13th June, 42 exuviae were found on heather on a steep south east slope ten metres above the Dubh loch here (what a climb for the larvae!). A further 15 were collected from Eun Loch a new site. These sites are managed by the Forestry Commission and the exuviae found with the help of the keen eyes of their Conservation Rangers during a training course.

Exuviae of the **Downy Emerald** were first seen on 21st May, three metres from the water's edge at Loch Bran confirming breeding at





©Christophe Brochard

**The Keeled Skimmer appears to be spreading in Scotland.**

this site. They were also recorded from Coire Loch and Loch Pollain Bhuide and other sites in Glen Affric.

Management advice has been given to landowners of **Northern Damselfly** sites during priority site discussions. Blair Atholl Rangers received training on larval identification at Logierait. The species is also still breeding at Loch Vaa pools on Speyside. Sites on Deeside were also visited and breeding evidence was found at Sandpit pool and good numbers seen at Fairy Loch. Here new sites were found in Glen Tanner, at Dinnet and Loch of Aboyne.

There have been possible sightings of single individuals near Alford and Tarland. This could add to the discontinuous range of the Northern Damselfly between upper Deeside and Castle Fraser, near Aberdeen, and also to the north near Rothes in Moray. Other very interesting possible sightings are from a new site in Angus, and one near Rothes in Moray. If confirmed, these records extend the range of this species considerably. More survey work for the Northern Damselfly is certainly needed.

The **Keeled Skimmer** was seen at several sites on Mull, in Morven, Ardnamurchan and west of Fort William. Adults were also reported from Colonsay confirming an earlier record. This species appears to be spreading, and dispersing individuals have been seen in Dumfries and Galloway.

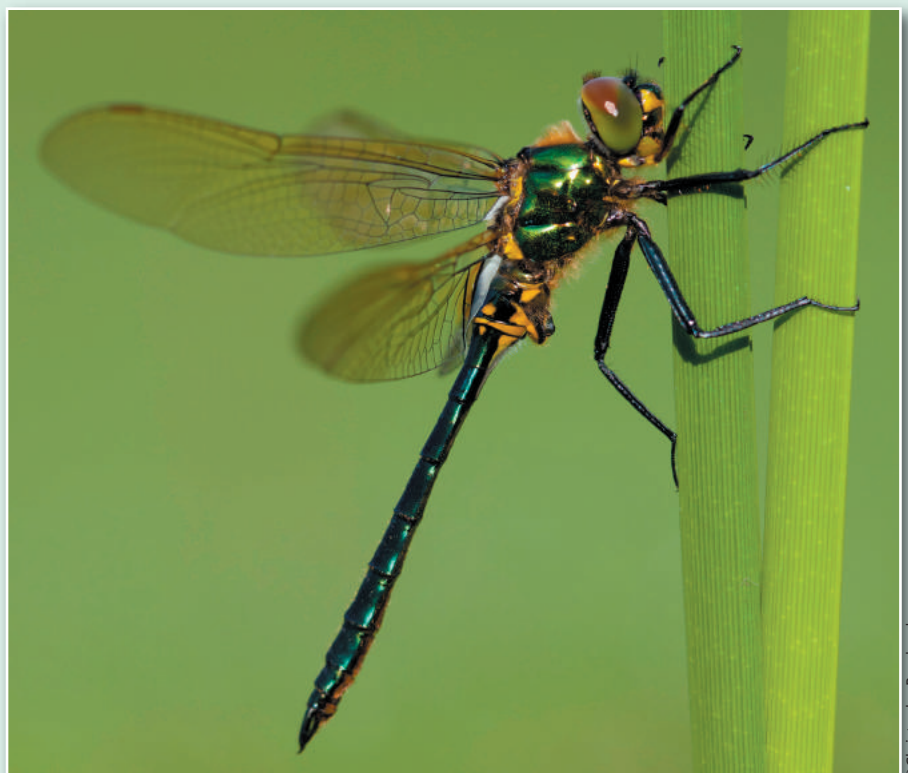
With a prolonged spell of good weather during the flight time of the **Beautiful Demoiselle** record numbers were seen on the monitored burns in Knapdale: 207 on the Loch Linne outflow and 333 on the Fairy Isles burn. Beavers have just started to use this burn, building dams later in 2016, so this may affect numbers in 2017. The Beautiful Demoiselle was also recorded from SW Islay for the first time and several new sites in Argyll.

The **Banded Demoiselle** appears to be moving north with males seen in areas just south of Edinburgh, also additional sites found on colonised burns. Larvae were found at several sites on Kirkgunzeon lane in Kirkcudbrightshire.

In Dumfries and Galloway the **Hairy Dragonfly** has been confirmed breeding at several sites and a new breeding site was found at Taliesin Community Woodland ponds.

There have been lots of sightings of the **Southern Hawker** again this year, as it continues its colonisation. There was only one report of the **Emperor Dragonfly** from SW Scotland.

**Brilliant Emerald breeding records were made at Loch Bran in 2016**



©Christophe Brochard

A very fresh **Red-veined Darter** was observed at Millar's Moss on 23rd July, where egg laying was witnessed in 2015; it possibly emerged here.

A Vagrant Emperor was seen on Orkney on 18th September and a very chilled adult, possibly the same one on 13th October (see more on page 32).

With people now being able to submit records in a variety of different ways, there have been over three thousand records submitted into iRecord, through apps or through the VC recorder. Over 150 people have contributed many days of work. I give thanks to all. I am also grateful for records from the UK Butterfly Monitoring transects as these are from under recorded areas and include several visits to a site.





# Scottish Updates





# News from Scotland

Daniele Muir, Scotland Officer

2016 has been a busy year for us in Scotland with the majority of my work continuing to raise awareness of dragonflies and how we can help them through public engagement work. Over the course of the year I attended five events including the Big Nature Festival, ran four teacher-training events, thirteen Dragonfly Identification and Recording training days, gave eight talks, organised six volunteer tasks and ran five guided walks. A new focus for me has been working with the Northern Damselfly, which has involved a number of visits to their strongholds on the edge of the Cairngorms National Park and I have greatly enjoyed learning more about these rare insects.

Members of the Scottish Group contribute a huge amount to the work of the BDS in Scotland. They continue to work as Area Co-ordinators, with their main aim being to link recorders to sites in their areas that have few records, or records older than ten years. Some keen members also ran guided walks and volunteer days and we hear from Colin Hall and Juliette Dinning who cover the Strathglass, South Loch Ness-side, Glen Moriston & Moray and the Aberdeenshire & Angus areas respectively, updating us about projects and activities that they have been involved with over 2016. We also have a short article from Peter Vandome with his Azure Hawker emergence date findings. Details of who covers which area can be found on the website on the Dragonflies in Scotland page at: <http://www.british-dragonflies.org.uk/content/dragonflies-scotland>

Over the past few years we have established a number of Key (or Priority) Sites across Scotland where we work with land owners/ managers to manage the site for the benefit of their rare dragonflies. With a focus on the Northern Damselfly last year, we now have new Key Sites for this species at Fairy Lochan in Glen Tanar, at Abernethy Forest near Boat of Garten and at Muir of Dinnet near Ballater and have offered habitat management advice to a number of other land managers in Deeside, Speyside and Perthshire.

We now have a Forestry Commission/ BDS Dragonfly Priority Sites Plan (suggestions for a catchier title are very welcome!). I met Forestry Commission's Species Ecologist, Kenny Kortland, to discuss how we could work together to benefit dragonflies. Pat Batty produced a list of twenty-seven Key Sites which are on Forestry Commission's estate. These sites were chosen due to the confirmed breeding of the following rare species:



© Christophe Brochard

Northern Damselfly, an endangered species found only in Scotland in the UK.

Northern Damselfly, Azure Hawker, Brilliant Emerald, Northern Emerald, White-faced Darter and Variable Damselfly. We also included a number of sites where breeding has not yet been confirmed, and FC will shortly put this information into their GIS. This will then be used to provide all staff with the relevant information; the staff will then be able to use it to inform their budgets, thereby targeting remedial and conservation action for dragonflies.

We held our second Scottish Dragonfly Conference at the A K Bell Library, Perth, in April. This was a successful day with sixty-six attendees enjoying the variety of talks ranging from Beavers & Dragonflies at Knapdale to recording, to changes in wildlife in Dumfries & Galloway to peatland restoration projects. It also offered a great opportunity to catch up with others from the world of dragonflies. Our next conference is booked for April 14th 2018, again at the A K Bell Library, so put the date in your diary!

We designated two new Dragonfly Hotspots in 2016 – one at Flanders Moss near Stirling and also Caerlaverock Wetland Centre near Dumfries. Both these sites are brilliant spots to see dragonflies, have easy access around the site and great locations for dragonfly-themed events. At Flanders Moss we ran a number of training days and walks, as well as a volunteer day where we improved the Moss for dragonflies by damming drainage ditches with peat dams. We also made a number of 'dragonfly pools' which are already being used by a number of dragonfly species. At Caerlaverock, the staff ran a number of dragonfly events, as well as running regular pond dipping and bug hunt sessions. There will be a Dragonfly Hotspot update in the next edition of Dragonfly News.

We are very grateful for continuing support from Scottish Natural Heritage and also from HDH Wills for our dragonfly work in Scotland.





© Juliette Dinning

Habitat work was carried out by volunteers at Fairy Lochan, Glen Tanar Estate in 2016.

## Highlights from Scotland

### Aberdeenshire & Angus

Juliette Dinning

Larval sampling in early Spring (often kicking holes in the ice!) turned up Northern Damselfly larvae at four previously unrecorded sites at Glen Tanar Estate and Invercauld Estate, and confirmed a strong population continuing at the well-known Fairy Lochan at Glen Tanar. This important pool for Northern damselfly was due for some management as it was last managed around fifteen years ago, and I had a meeting with Head Ranger Eric Baird in the winter to plan some habitat maintenance work for volunteers in summer 2016.

I gave a talk at Aberdeen's James Hutton Institute in February looking at habitat for Northern Damselfly and summarising the recording work that I have done in the last ten years on the species and how this has expanded what we know about its range in the region. On a cold and sunny day at the end of March I was lucky to spend a day with the Balmoral Estate Ranger Service and we visited several pools to survey for dragonfly larvae and other invertebrates. We found dragonfly larvae and also three species of mayfly. It was a fun day in a fantastic setting and there was plenty of other wildlife to see including Black Grouse.

Visits in April and June to the Game and Wildlife Conservation Trust's new Scottish Demonstration Farm at Tarland allowed project researcher Marlies Nicolai and I to carry out some survey work looking at damselfly larvae and other freshwater invertebrates and their habitats at one of the ponds. In April I also visited the National Trust for Scotland's Crathes Castle estate near Banchory to discuss reinstating an old curling pond on the estate and to carry out the annual larval survey with Ranger Toni Watt. We have been carrying out larval surveys of freshwater invertebrates at a pond in a clearfell area on the estate for several years to

see whether it has had any impact on the number and variety of animals that we find. In June I held a guided dragonfly walk for members of the public on behalf of Scottish Wildlife Trust and National Trust for Scotland at NTS Castle Fraser near Kemnay and continued the dragonfly survey transect for its eighth year. Volunteers continued with rush cutting and removal of small trees as part of the Peatland Restoration Grant to ensure that the marsh area stays wet and suitable for the bog mosses which in turn ensures good habitat for the dragonfly populations. Surveys for Forestry Commission Scotland at Cambus O' May near Ballater added some knowledge of the dragonfly populations breeding at several of the pools. BDS Scotland Officer, Daniele Muir, and I met in June at Fairy Lochan at Glentamar in preparation for invertebrate surveys prior to management work starting, and in October it was great to revisit and see the results of the hard work carried out by the volunteers to create more open water habitat where rushes and other vegetation and small trees had been encroaching.

## Dragonflies with Dundee High School

Gordon Ross, Outdoor Activities

Coordinator, Dundee High School

In 2015/16 a small group of pupils were given the opportunity to participate in the John Muir Award. This was a trial year and the concept of discovering, exploring, conserving and sharing was very exciting but with a degree of uncertainty we looked to establish a plan for the year.

After developing a link with SNH all worry was soon laid to rest. During the conservation phase at Tentsmuir, we were introduced to Daniele Muir, the Scottish Officer for BDS. After initially helping to restore a choked pond the groups passion for the wonderful dragonfly grew as Daniele kindly educated us on the Dragonfly 'life cycle' and how to identify, record and add details to BDS data base. Kieran Forster recounts some of the experiences "we set about getting ankle deep in the water to clear the volume of muck that was encasing the pond and choking the life out of it. We also cleared enormous amounts of dead wood that was obscuring the pond and harmful for both dragonfly larvae and adults." During this time we met Daniele who kindly offered to educate the team on Dragonflies ahead of our exploring phase to Sutherland where we undertook species counts in prime habitat locations and uploaded our findings on BDS's data base. It is wonderful to see the pupils embrace the John Muir Award and connect with nature. Working with Scottish Natural Heritage staff and Daniele at British Dragonfly Society has really helped our pupils develop greater awareness of, and a responsibility to help conserve, our wild places.





# Studies on the Azure Hawker Peter Vandome

My findings were that the spring emergence of Azure Hawker probably occurred about when Four-spotted Chasers began emerging from exposed moorland, which was probably 22nd - 25th May by Loch Maree (a bit later in Glen Torridon). Azure Hawker emergence had certainly begun by 27th May when one was flying in Slatterdale Forest, and a larva I found on 23rd May had emerged by 29th May. The spring emergence was probably pretty much over by 2nd June when I found at least 12 flying in Slatterdale Forest. These dates lie within the period I have previously estimated for spring emergence except for particularly early or late seasons.



Peter Vandome, from Edinburgh, continued to study the Azure Hawker and emergence times in the Loch Maree and Torridon area in 2016. © Peter Vandome

## Glen Affric Bog Squad

Colin Hall

Peatlands are now increasingly being recognised as valuable parts of the natural landscape, supplying ecosystem services of carbon storage and flood alleviation. They are also important wildlife habitats hosting specialist organisms, many of which are endangered due to the scarcity of their habitats. Amongst them are some of Britain's rarest Odonata such as the White-faced Darter, Northern Emerald and Azure Hawker.

There have been numerous projects around the country dedicated to peatland restoration but, apart from work on the nearby RSPB reserve at Corrimony, until recently none had been undertaken in Glen Affric. This glen holds breeding populations of 6 of the 12 locally or nationally important dragonflies and 15 of Scotland's 23 resident species, but there are still large areas which are not dragonfly friendly due to standing timber plantations or felled sites which retain their drainage ditches.

Peatland restoration can be an expensive process, whether using machines or volunteers knocking in plastic piles (which are surprisingly costly), and most projects require significant funding.

Following on from the successful Peatland Action Fund project in autumn 2015, which was documented in Darter last year, we wanted to continue working in Glen Affric. Unfortunately most of the large funding streams are closed so we had to devise a project which ran without any ongoing costs. We were able to get a small grant from Action Earth which provided us with the necessary safety equipment and a few tools to get us started, and volunteers have generously donated additional equipment since then.

We wanted to focus on habitat creation for dragonflies, and other species, by restoring small areas to act as "stepping stones" allowing species to spread along, and out of, the glen. A number of potential sites were identified, often less than 1 hectare in size, and work began in November last year. Volunteers come out on the last Sunday of each month, weather permitting, and we are also organising joint task days with other local conservation organisations.

When peat becomes dried out it loses its structure which reduces its ability to retain water. We dig through this degraded surface layer to the "good" peat below. The ditches are then blocked with a dam made from this peat. This means that not only is the water level raised in the ditch and surrounding peat, but also a new bogpool is created. As this process is repeated a network of shallow, linear ditch pools and deeper, more variably shaped pools are formed. They are often partly filled by the end of the day that they are created. Hopefully these new habitats will be colonised by nearby populations and we will be monitoring them over the years to see at what rate this happens.

By running a volunteer project, even on a small scale, it allows us to be in a good position to take advantage of any funding which may become available in the future to expand our capacity.

It's very enjoyable and rewarding work, and a chance to get really muddy, so if anyone wishes to help in any way then please get in touch with me at [cbhall@hotmail.co.uk](mailto:cbhall@hotmail.co.uk).



# Odonata on Orkney

Graeme Walker

The 2016 season saw plenty of warm, dry weather, at least in comparison to the previous two years, producing 162 records from 26 keen-eyed folk.

The majority of the records received came from Mainland, 46%, but the island of Hoy was a close second with 41%, despite being only a quarter of the area of its larger cousin. Six of the archipelago's eight breeding species were seen, with no records for Golden-ringed Dragonfly and Four-spotted Chaser. However, these species are only present in low numbers on Hoy, so it is hoped that recorder effort was the limiting factor, rather than local extinction.

Notable records during the year included a new island for Large Red Damselfly (Shapinsay, 23/05/16) and also for Black Darter (Eday, 29/07/16), as well as the 're-discovery' of Blue-tailed Damselfly on Graemsay (05/08/16). Emerald Damselflies continued to spread south and east across Hoy, whilst a Mainland record of a female Common Hawker ovipositing in Russadale, Stenness on 16/08/16, was very encouraging. The largest aggregation of Common Blue Damselflies was a record of 22 on Wee Fea in Hoy on 23/07/16.

On social media, a new Facebook page, OrkOdo, proved a useful resource for sharing local news and photographs. During the year, a couple of talks on the county's Odonata were given to local groups and, for National Dragonfly Week, two walks were organised, one on Hoy and the other on Mainland.

However, the year's most exciting news was the autumnal 'influx' of two well-travelled Vagrant Emperors. The winds during this time were either south or south east, making it difficult to estimate the dragonflies' origin, but it is still quite a journey from either West Africa or the Middle East. On 18/09/16, a male in flight was photographed by Kim McEwen near Sandwick, South Ronaldsay. This was an amazing achievement for such a brief view. Then, several weeks later, on 13/10/16, another male was found in a cobweb on a shed door in Birsay, Mainland, by Sue and Graham Wharton. This individual was presumed to be dead, rescued from its cobweb prison and placed in an outbuilding whilst an identification was confirmed.

Fortunately, once the news hit the BDS web and Facebook pages, I was able to contact Sue to arrange a viewing of the recently-departed insect, only to discover that it was still alive! The weather



©Christophe Brochard



© Graeme Walker

Top: A Common Hawker. Bottom: The resurrected Vagrant Emperor.

was particularly cold, wet and wild, so we had to wait another 24 hours for a brief sunny, dry spell before we could release the Vagrant Emperor back into the air. It was wonderful to watch a dragonfly 'awakening' from a torpor with the warmth of some weak autumnal sunshine. The colour of its blue saddle intensified, head and eyes were 'groomed' and then, after a few brief seconds of wing whirring, it was airborne and away. Sadly, the continuing south easterly winds meant that, if the dragonfly survived long enough, next landfall would be Iceland!



## 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 isocoles</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 <i>Sympetrum nigrescens</i> Highland Darter |                              | Scarce Chaser                                      | <i>Libellula fulva</i>          |
|   |                              | Four-spotted Chaser                                | <i>Libellula quadrimaculata</i> |
|   |                              | Black-tailed Skimmer                               | <i>Orthetrum cancellatum</i>    |
|   |                              | Keeled Skimmer                                     | <i>Orthetrum coerulescens</i>   |
|   |                              | Black Darter                                       | <i>Sympetrum danae</i>          |
|   |                              | Yellow-winged Darter                               | <i>Sympetrum flaveolum</i>      |
|   |                              | Red-veined Darter                                  | <i>Sympetrum fonscolombii</i>   |
|   |                              | Ruddy Darter                                       | <i>Sympetrum sanguineum</i>     |
|   |                              | Common Darter                                      | <i>Sympetrum striolatum</i> *   |

**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.<br>† - 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>      |

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

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



## BDS RECORDING SCHEME: LIST OF COUNTY DRAGONFLY RECORDERS

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

| Vice-County                       | County Dragonfly Recorder              | Contact Details  |
|-----------------------------------|--|--|
| <b>England &amp; Wales</b>        |  |  |
| 1. West Cornwall<br>(with Scilly) | Perry Smale                            | 48, Madison Close, Hayle, Cornwall, TR27 4BZ. Tel: 07412 262184.<br>smaleperry@yahoo.co.uk   |
| 2. East Cornwall                  |  |  |
| 3. South Devon                    | Dave Smallshire                        | 8 Twindle Beer, Chudleigh, Newton Abbot, TQ13 0JP. Tel: 01626 853393,<br>E-mail: davesmall@btinternet.com  |
| 4. North Devon                    |  |  |
| 5. South Somerset                 | Chris Iles                             | Arborfield, Holcombe Hill, Holcombe, Radstock, Somerset BA3 5DN.<br>Tel: 01761 239092. kifill22@hotmail.com  |
| 6. North Somerset                 | Position Vacant                        | Send to Chris Iles (VC 5)  |
| 7. North Wiltshire                | Steve Covey                            | 130, White Edge Moor, Liden, Swindon, Wilts, SN3 6LY. Tel: 01793 349040,<br>E-mail: steve.covey@ntlworld.com, blog: <a href="http://wiltshire-dragonfly-news.blogspot.co.uk">http://wiltshire-dragonfly-news.blogspot.co.uk</a>  |
| 8. South Wiltshire                |  |  |
| 9. Dorset                         | Andrew Brown                           | Ground floor flat, 15 Lytton Road, Bournemouth, BH1 4SH<br>Tel: 07891 573267. brown_a_r@yahoo.co.uk<br>Website: <a href="http://www.dorsetdragonflies.org.uk">www.dorsetdragonflies.org.uk</a> , Facebook 'Dorset Dragonflies'   |
| 10. Isle of Wight                 | Position Vacant                        | Send to <a href="mailto:records@british-dragonflies.org.uk">records@british-dragonflies.org.uk</a>   |
| 11. South Hampshire               | Paul Ritchie                           | Tel: 07484 813372. <a href="mailto:paulritchie@hampshiredragonflies.co.uk">paulritchie@hampshiredragonflies.co.uk</a>  |
| 12. North Hampshire               | David Murdoch                          | 01962 808853. <a href="mailto:damurdoch@hotmail.com">damurdoch@hotmail.com</a>   |
| 13. West Sussex                   | Bob Foreman / Ben Rainbow              | Records to Bob Foreman. Tel: 01273 497570. <a href="mailto:bobforeman@sussexwt.org.uk">bobforeman@sussexwt.org.uk</a> .<br>Local enquiries to Ben Rainbow. <a href="mailto:ben.rainbow@ntlworld.com">ben.rainbow@ntlworld.com</a>  |
| 14. East Sussex                   |  |  |
| 15. East Kent                     | John & Gill Brook                      | 1 Barrack Cottages, Lower Street, Broomfield, Maidstone, Kent, ME17 1PU.<br>Tel: 01622 862227  |
| 16. West Kent                     |  |  |
| 17. Surrey                        | Surrey Biodiversity Information Centre | Surrey Biodiversity Information Centre, c/o Surrey Wildlife Trust, School Lane, Pirbright, Woking, Surrey, GU24 0JN. Tel: 01483 795448.<br><a href="mailto:surreybic@surreywt.org.uk">surreybic@surreywt.org.uk</a>  |
| 18. South Essex                   | Ted Benton                             | 13 Priory Street, Colchester, Essex, CO1 2PY. Tel: 01206 86732,<br>E-mail: <a href="mailto:tbenton@essex.ac.uk">tbenton@essex.ac.uk</a>  |
| 19. North Essex                   |  |  |
| 20. Hertfordshire                 | Roy Woodward                           | 62c High Street, Cheshunt, Hertfordshire EN8 0AH. Tel: 07855 567332.<br><a href="mailto:roy.rkwoodward@ntlworld.com">roy.rkwoodward@ntlworld.com</a>   |
| 21. Middlesex                     | Nigel Scott                            | 55, Manygate Lane, Shepperton, MIDDLESEX, TW17 9EJ. Tel 01932 267645<br><a href="mailto:nigel.mcm@ntlworld.com">nigel.mcm@ntlworld.com</a>   |
| 22. Berkshire                     | Mike Turton                            | 7 Fawcett Crescent, Woodley, Reading, Berkshire, RG5 3HX.<br>E-mail: <a href="mailto:berksdragonflies@gmail.com">berksdragonflies@gmail.com</a>  |
| 23. Oxfordshire                   | 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.<br>E-mail: <a href="mailto:bucksdragonflies@googlemail.com">bucksdragonflies@googlemail.com</a>   |
| 25. East Suffolk                  | Adrian Parr                            | 10 Orchard Way, Barrow, Bury St Edmunds, Suffolk, IP29 5BX. Tel: 01284 810 465. E-mail: <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. E-mail: <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,<br>E-mail: <a href="mailto:valperrin@aol.com">valperrin@aol.com</a>   |
| 30. Bedfordshire                  | Rory Morrissey                         | 25 Alwins Field, Leighton Buzzard, LU7 2UF. Tel: 01525 372477<br><a href="mailto:dragonflies@bnhs.org.uk">dragonflies@bnhs.org.uk</a>  |
| 31. Huntingdonshire               | Val Perrin                             | See VC 29 above  |
| 32. Northamptonshire              | Mark Tyrrell                           | 8 Warwick Close, Raunds, Wellingborough, Northants, NN9 6JH. Tel: 01933 389 748, E-mail: <a href="mailto:mark.p.tyrrell@ntlworld.com">mark.p.tyrrell@ntlworld.com</a> ,<br>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,<br>E-mail: <a href="mailto:canditwissell@btinternet.com">canditwissell@btinternet.com</a>  |
| 34. W. Gloucestershire            |  |  |
| 35. Monmouthshire                 | Position Vacant                        | Send records to <a href="mailto:records@british-dragonflies.org.uk">records@british-dragonflies.org.uk</a>   |
| 36. Herefordshire                 | Evan Bowen-Jones                       | c/o Hereford Wildlife Trust, Lower House Farm, Ledbury Road, Tupsley, Hereford, HR1 1UT. Tel: 01684 564 872. <a href="mailto:records@herefordshirewt.co.uk">records@herefordshirewt.co.uk</a>  |
| 37. Worcestershire                | Mike Averill                           | 49 James Road, Kidderminster, Worcs, DY10 2TR. Tel: 01562 638571,<br>E-mail: <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.<br>Tel: 01926 632 400, E-mail: <a href="mailto:peter@reeve60.org.uk">peter@reeve60.org.uk</a> ,<br>website: <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<br>Tel: 01902 344716. <a href="mailto:jacksongrus@talktalk.net">jacksongrus@talktalk.net</a>  |
| 40. Shropshire                    | Sue Rees Evans                         | <a href="mailto:info@shropshiredragonflies.co.uk">info@shropshiredragonflies.co.uk</a> Tel: 01743 354507<br>Website: <a href="http://shropshire-dragonflies.co.uk">http://shropshire-dragonflies.co.uk</a>   |





|   |                             |  |
|---|-----------------------------|--|
| 41. Glamorgan <sup>1</sup>                      | Mike Powell                 | 87 Coed Glas Road, Llanishen, Cardiff, CF14 5EL. Tel: 029 2076 2182<br>E-mail: mike.powell2011@btinternet.com  |
| 42. Breconshire <sup>1</sup>                    | Keith Noble                 | 25 Belle Vue Gardens, Brecon, LD3 7NY, Tel: 01874 620133,<br>E-mail: knoble.kn@btinternet.com  |
| 43. Radnorshire <sup>1</sup>                    | Bob Dennison                | Maes y Geidfa, Crossgates, Llandrindod Wells, Powys, LD1 6RP. Tel: 01597 851 702. E-mail: rd19366@googlemail.com   |
| 44. Carmarthenshire <sup>1</sup>                | Stephen Coker               | Mountain Grove, Clarboston Road, Haverfordwest, Pembrokeshire, SA63 4SG<br>Tel: 01437 563 566 E-mail: stephen.coker@live.co.uk   |
| 45. Pembrokeshire <sup>1</sup>                  |                             |  |
| 46. Cardiganshire <sup>1</sup>                  | Lin Gander                  | Penwalk Llechryd, Cardigan Ceredigion, SA43 2PS. Tel: 01239 682405<br>E-mail: lingander@strandings.demon.co.uk   |
| 47. Montgomeryshire <sup>1</sup>                | Anne Coker                  | Mountain Grove, Clarboston Road, Haverfordwest, Pembrokeshire, SA63 4SG. Tel: 01437 563 566 stephen.coker@live.co.uk   |
| 48. Merionethshire <sup>1</sup>                 | Allan Brandon               | Bryn Heilyn, Rowen, Conwy LL32 8YT. Phone 01492 651 066,<br>E-mail: allanrowenconwy@sky.com<br>Website: www.british-dragonflies.org.uk/local_groups/north-wales-dragonflies  |
| 49. Caernarvonshire <sup>1</sup>                |                             |  |
| 50. Denbighshire <sup>1</sup>                   |                             |  |
| 51. Flintshire <sup>1</sup>                     |                             |  |
| 52. Anglesey <sup>1</sup>                       |                             |  |
| 53. South Lincolnshire                          | Nick Tribe/Richard Chadd    | Nick Tribe, 12 Little Bargate Street, Lincoln, LN5 8JR. Tel: 01522 822069<br>nick.tribe@ntlworld.com   |
| 54. North Lincolnshire                          |                             |  |
| 55. Leicestershire (with Rutland)               | Ian Merrill                 | 125 Church Lane, Whitwick, Coalville, Leicestershire. LE67 5DP<br>Tel: 01530 815886. i.merrill@btopenworld.com   |
| 56. Nottinghamshire                             | Dave Goddard                | 30 Cliffe Hill Avenue, Stapleford, Nottingham, NG9 7HD,<br>E-mail: david.goddard@wyg.com   |
| 57. Derbyshire                                  |                             |  |
| 58. Cheshire                                    | David Kitching              | 30 Carleton Road, Poynton, Stockport, Cheshire, SK12 1TL. Tel: 01625 423249. davidk@broccross.co.uk Also online: www.broccross.com   |
| 59. South Lancashire                            | Steve White                 | Tel: 01519203769 (daytime). stevewhite102@btinternet.com   |
| 60. West Lancashire                             |                             |  |
| 61. South-east Yorkshire                        | Martin Roberts              | 48 Stratford Way, Huntington, York YO32 9YW Tel: 01904 761918<br>vc61@yorkshiredragonflies.org.uk<br>Facebook Page: www.facebook.com/groups/yorkshiredragonflies             |
| 62. North-east Yorkshire                        | Keith Gittens               | Sunnybank, Low Street, Hushwaite. York. YO61 4QA. Tel: 01347 868606.<br>brilliantemerald@btinternet.com  |
| 63. South-west Yorkshire                        | Alistair McLean             | Museums Sheffield, Weston Park, Western Bank, Sheffield, S10 2TP.<br>Tel: 0114 278 2648. alistair.mclean@museums-sheffield.org.uk  |
| 64. Mid-west Yorkshire                          | Tom Hubball                 | 4 South View Terrace, Silsden, W.Yorks, BD20 0AS, Tel: 01535 678334<br>email: vc64dragonfly@virginmedia.com  |
| 65. North-west Yorkshire                        | Keith Gittens               | Sunnybank, Low Street, Hushwaite. York. YO61 4QA. Tel: 01347 868606.<br>brilliantemerald@btinternet.com  |
| 66. Durham                                      | Ian Waller                  | 4 Basic Cottages, Coxhoe, Co. Durham, DH6 4LF,<br>email: aeshna@hotmail.com  |
| 67. S. Northumberland                           | Michael Gardner             | 28 Coxlodge Road, Newcastle-Upon-Tyne, NE3 3UZ. Tel: 07827 842516<br>vc67dragonflies@gmail.com   |
| 68. N. Northumberland                           |                             |  |
| 69. Westmorland                                 | David Clarke                | Burnfoot, Cumwhitton, Brampton, Cumbria, CA8 9EX. Tel: 01228 560117,<br>email: davidclarke6970@gmail.com   |
| 70. Cumberland                                  |                             |  |
| 71. Isle of Man                                 | Position vacant             | Send to records@british-dragonflies.org.uk   |
| <b>Scotland</b>                                 |                             |  |
| From 72. Dumfriesshire to 112. Shetland Islands | All records to Pat Batty    | Kirnan Farm, Kilmichael Glen, Lochgilphead, Argyll, PA31 8QL. Tel: 01546 605316, E-mail: dragonfly.batty@gmail.com   |
| 113. Channel Isles                              | Julian Medland              | Clyne, Rue de la Ronde Cheminée, Castel, Guernsey, GY5 7GE. Tel: 01481 255 411. medland@cwgsy.net  |
| <b>Northern Ireland and Eire</b>                | All records to Brian Nelson | National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, 7 Ely Place, DUBLIN 2, IRELAND.<br>brian.nelson@ahg.gov.ie Facebook 'Dragonfly Ireland' |
| Migrant Dragonfly Project                       | Adrian Parr                 | 10 Orchard Way, Barrow, Bury St Edmunds, Suffolk, IP29 5BX. Tel: 01284 810465. E-mail: adrian.parr@btinternet.com  |