

West Cornwall with Scilly East Cornwall David Cooper

The beginning of the season went as I would expect with Large Red Damselflies arriving in late March, followed by Azure Damselflies. Then, a little later, came the Dragonflies: the Four-spotted Chaser and the Broad-bodied Chaser; this year the Broad-bodied Chasers arrive first and outnumber the Four-spotted Chasers.

All was going well until the high temperatures arrive; all my local dragonfly hotspot ponds dried out completely which was cause for concern as the eggs laid by female dragonflies, which were seen ovipositing early in 2022, and any larvae had virtually no chance of survival. I witnessed a very sad scenario oat one site: in the middle of what is usually 2 foot of water remained only a tiny puddle, where a dragonfly larvae was heading for sanctuary; the following day the puddle had disappeared. That same month I found an empty Hanker larval case attached to a clump of reeds in the middle of another nearby pond that had dried out six weeks earlier- unusual!

There were some winners and losers during the 2022 season: more **Black-tailed Skimmers**, **Keeled Skimmers**, and **Migrant Hawker** were sighted than in previous seasons. On the other hand, **Common Hawkers**, **Emerald Damselflies** and **Southern Hawkers** didn't fare quite as well. Hawkers were late arrivals and I assume the drought took its toll on the larvae population.

Again in 2022 there was a number of **Southern Migrant Hawkers** sightings, which was encouraging. However, my most memorable event was the sighting of **Small Red Damselfly** which showed up in numbers at two Cornish sites; hopefully they will return. Two more interesting finds were a male **Black Darter** in Falmouth, which is not its usual habitat and a **White-legged Damselfly**, which was spotted on the River Tamar, near Calstock; hopefully they will been seen again.

Each month, during the dragonfly season, a small group and I monitor the Odonata at the Beaver Project site in Ladock, and have been doing so for the past four years. I'm pleased to report the population is stable yet still at 17 species which is a reasonable count for any site.

I am now looking forward to next spring and seeing what surprises are in store. Many thanks to everyone who sent their sightings to either irecord or myself. Also thanks to Chris Jones, the Beaver project and my little group of volunteers.

See you out there!



Small red damselfly- David Cooper

3: South Devon

4: North Devon

Dave Smallshire

The outstanding event of 2022 was an unexpected series of records of **Norfolk Hawker** from Slapton Ley between 17 June and 29 July, with probably nine males seen on 27 June. All records were in the area around Slapton Bridge, especially around the dipping platform, where females were photographed egg-laying on 12 and 14 July. These are the first since the only previous record, a male at Exminster Marshes on 12-13 July 2018. However, as this species usually has a two-year life cycle, the numbers seen at Slapton suggest that breeding may have followed colonisation in 2020, or even earlier.

It was also a good year for **Scarce Chaser**, with the first records for the north of Devon coming from Braunton Marsh; following an immature photographed at a drain beside the toll road on 27 May, about 20, including two mating pairs, were found in the same area on 3 June. Breeding was proven at all the well-established sites: Dart's Farm, Exeter Canal and Exminster-Powderham Marshes, Grand Western Canal and Lower Bruckland Ponds, with individuals wandering into Exeter city, including two at the Royal Devon & Exeter Hospital on 27 May. Clennon Valley Lakes, Paignton, had records for the fifth successive year, while the most notable wanderers came from Little Bradley Ponds (male on 2 June), Stover Lake (male on 2 June, three males on 6 June), Squabmoor Reservoir (two males on 3 July) and Slapton Ley (male photographed near the dipping platform on 17 July).

Periods of hot weather have no doubt aided the dispersal of species such as Norfolk Hawker and Scarce Chaser, but also Lesser Emperor, with males seen at the Grand Western Canal on 11 June and Roborough Rewilding on 12 July, while at Southdown Valley, Soar, there was a male on 29 July and 27 August with a pair egg-laying in tandem on 8 August (only the second breeding attempt for Devon, following an egg-laying pair at Squabmoor Reservoir in 2005). Southdown Valley also had the lion's share of Red-veined Darters, with a good series of records between 17 June and 27 August, including a tandem pair egg-laying on 21 June and eleven, including three tandem pairs, on 10 July; four males seen there on 22 September may have been evidence of successful breeding. Elsewhere, one flew in off the sea at Dawlish Warren on 27 May and a male was on the coastal path near Budleigh Salterton on 6 July.

There were several records of **Small Red Damselfly** away from the usual areas, suggesting that this species is more prone to wandering than has previously been thought, with up to four at Aylesbeare Common in July, including a tandem pair, a male at Emsworthy (Dartmoor) on 21 July and up to five, including a mating pair, at Godborough, Bideford, in late July. The last is remarkable, but less so in the light of the discovery on 13 July of at least 294 during a survey of ponds at Combeshead Rewilding, near Broadwoodwidger. In contrast, no records were received for **Scarce Blue-tailed Damselfly** and at the time of writing, details from the **Southern Damselfly** transects had not been received.

Hairy Dragonfly breeding records came as usual from Bystock DWT Reserve, Exeter Canal-Exminster Marshes and Stover, while breeding evidence was found at Dart's Farm, Topsham, the Grand Western Canal, Little Bradley Ponds and Ventiford Pools. There were isolated records of males at Aylesbeare Common and Gallows Cross SUDS pools and there were four sightings of singles at Braunton Burrows, including the pond where egg-laying was seen in 2019.

There were **Red-eyed Damselfly** records from Exeter Canal, Grand Western Canal, Squabmoor Reservoir, Stover (150 on 21 May) and Ventiford Pools (125 on 21 May), while numbers increased at Little Bradley Ponds (22, including a mating pair, on 2 June). One appeared at Bovey Heath on 2 June and there were small numbers at Dart's Farm fishing ponds in May, June and August.

Small Red-eyed Damselfly goes from strength to strength, with peak counts of 600+ on the Exeter Canal (17 July), 577 at Stover (15 July) and 71 at nearby Ventiford Ponds (5 August). Up to 30 were counted and breeding activity noted at Clennon Valley Lakes, Dawlish Warren, Gallows Cross SUDS (Kingsteignton), Little Bradley Ponds and Southdown Valley (Soar). New sites included Gammaton Reservoirs, near Bideford (30+ counted) and single males were seen at Lake (Langtree, near Great Torrington) on 14 August, Slapton Ley on 17 July and, away from water, at Aylesbeare Common.

The only lowland records of **Common Hawker** came from Witheridge Moor (at 230m ASL) and the only Dartmoor fringe record came from Emsworthy DWT Reserve (where it was seen egg-laying at 355m ASL).

Downy Emerald was seen as usual at Little Bradley Ponds, Bystock DWT Reserve and Squabmoor Reservoir.

The only record of **Ruddy Darter** was of a presumed migrant male at Soar on 15 September. Single wandering **Brown Hawkers** were seen at Godborough on 5 July and over Badgworthy Water above Malmsmead on 11 July, only the seventh and eighth county records. Finally, a female **Vagrant Emperor** was at Bovey Heath on 17 September.

Devon BDS Group field meetings comprised joint meetings to the Grand Western Canal on 29 May with Mid Devon Wildlife and to Bystock and Squabmoor on 3 July with the Devonshire Association, as well as training days at Stover for volunteers. The weather wasn't great for the GWC meeting, although we did see territorial Hairy Dragonflies and newly-emerged Scarce Chasers. Surprisingly, the latter also featured at Squabmoor, with two territorial males, in addition to the expected Small Red Damselflies at Bystock. Past BDS President, Andy McGeeney, has been very active, setting up a North Devon Dragonfly Network based on a WhatsApp group, and running a training session.

Stover has recently succeeded in gaining £2.1 from the National Heritage Lottery Fund, with match-funding of a further £1.5, to do extensive works in the Country Park, including dredging the sediment from part of the lake. Preparatory work felling a conifer plantation next to the lake took place last autumn, making space to take the dredged sediment. The BDS has agreed to train a dozen 16-25-year-olds to monitor the fate of Stover's dragonflies, before and after the dredging. I will need help to run roughly monthly training days during May-September for the next three years, so please contact me if you

have reasonable ID skills and some spare time to spend at Stover imparting your knowledge. (davesmalls@btinternet.com)



Norfolk Hawker Female ovipositing at Slapton Ley. Pete Norwood

7. North Wiltshire8: South WiltshireRosie Ray

In 2022 I joined the Action for Insects Team, led by Michael New of the Wiltshire Wildlife Trust. The aim is to collect insect and plant data from all the county's reserves (37 in total). This was a great opportunity to survey sites in the south of the county which I hadn't been to before like Blackmoor Copse and Landford Bog, which is just inside the New Forest National Park. Consequently, there were more pairs of eyes to record the Odonata.

Wiltshire is a large county of just over 1300 square miles with a vast diversity of habitats from chalk downland, meadows, wetlands, woodlands and acidic bogs. As a result, it has the potential for a wide variety of Odonata species.

The spring started very mild here and, consequently, there were some early emergers. The first record of the year was of a **Large Red Damselfly** on 13 April over the pond at Ravensroost Reserve, in the north, sent in by Robin Griffiths.



Male large red damselfly

It was another 3 weeks before they began to emerge elsewhere due to an unexpected cold snap.

Downy Emeralds and Hairy Dragonflies appeared at Lower Moor Farm, in the north, in the warm sunshine of mid-May. Downy Emerald and Broad-bodied Chasers appeared at Blackmoor Copse, in the far south, later in the month.

Emergence continued throughout the county with good numbers of the early species: Banded and Beautiful Demoiselle, Large Red Damselflies, White-legged Damselflies, Azure Damselflies, Common Blue Damselflies, Blue-tailed Damselflies, Red-eyed Damselflies, Hairy Dragonfly and Downy Emerald, and Broad-bodied Chaser and Four Spotted Chasers.

Then disaster struck. Like many other places in the UK, Wiltshire experienced some unprecedented high temperatures and soon the breeding ponds started to dry up and water levels in lakes, rivers and streams dropped. For weeks there was no rain, and the around everywhere was cracking.





Downy Emerald dragonfly

Male Broad Bodied Chaser

Numbers plummeted as water bodies became scarce. While doing a survey at Conigre Mead, on the River Avon, White-legged Damselflies were recorded for the first time at the site. But the intense heat was having a negative impact on breeding and breeding sites.

As the drought lessened, **Lesser Emperors** were recorded in copulation, and ovipositing, at Lower Moor Farm and Cleveland Lakes...They *have* been recorded here in previous years but they are a very 'hit and miss' species. In July, I had a record sent in of a "Green-eyed Hawker" also at Lower Moor Farm. I had no idea what this could be so went to investigate. It turned out to be a **Norfolk Hawker**! It caused quite a stir for the 10 days or so that it was around. I have no idea how it came to be there, but it was a pristine specimen and delighted many photographers, including myself.



Norfolk Hawker

Small Red-eyed Damselflies made an appearance in mid-summer, and Migrant Hawkers and Brown Hawkers flew late into the autumn. Last but not least, I must mention Willow Emerald Damselflies: I have had records, with photographs, from the Westbury and Shrewton area in the middle of the county and the eastern section of the Cotswolds Water Park (Wiltshire, Gloucestershire, Oxford border). All records are confirmed; this is very exciting for the coming season and shows how far this iconic species has spread.

The last record for 2022 was of **Common Darters** ovipositing on the 22nd November by Peter Donovan.

As always, sincere thanks to everyone who has sent in records and a warm welcome to the new recorders.

VC9 Dorset by Andrew Brown

2022 got off to a flying start; after what seemed like at eternal winter, there was a glorious spring in which I saw my first ever Variable Damselfly, and the first record for Dorset in some 30 years, so this was quite a thrill! I must give credit to John Curd and Adrian Parr for verifying. I took a photo of what looked like an Azure Damselfly, although the markings were not typical. I wonder if this species has perhaps been overlooked, or perhaps as with many other species, it's spreading from an adjacent county. Looking at NBN is seems to be very thin on the ground in Southern Central UK.

Historically, there are only five records for **Variable Damselfly** in Dorset, the last one being from 1996. I did see there are two more recent records, in 2005 and one from 2016, both of which I am sure are errors! It shows I think how diligent we need to be when verifying!

This year also brought more records of another new arrival to Dorset: the Willow Emerald Damselfly, of which a glorious three sightings were made, with numerous photos of each. Two males became local celebrities at Hengistbury Head and many people had the pleasure of going to view them and photograph them there. I went three times and failed each time, though I did see my first Willow Emerald Damselfly in London in the summer, so I was relieved!

In all 35 species were recorded in Dorset in 2022, which is approaching the county's full species list. The only species which wasn't recorded was the **Vagrant Emperor**, but it does occur regularly along the west coast of Dorset.

I want to take this opportunity to sing the praises of the individuals and groups who are doing such amazing work recording Odonata in Dorset. Firstly Kieth Powrie, who for well over 20 years has been recording at the Moors Valley. Fen D'Lucie who set up her own recording group for Tadnoll and Winfrith reserves and recently added Higher Hyde Heath. The team at the National Trust, Darren, Gen and Michelle, who have set up the annual Southern Damselfly recording and also helped set up regular recording at Studland, with the help of Lorraine Munns from Butterfly Conservation. Also to Luke Johns who set up transects on Brownsea Island and has got some fantastic records. Ian Ballam and Nick Hull for all their work at Lychett Bay, and lastly to Brett Spencer who has been very generous and given me all his records from Weymouth with it amazing sites: Radipole Lake, Lodmoor and Bennets Water Garden.



Male Willow Emerald Damselfly male. Andrew Brown



Variable Damselfly female. Andrew Brown

VC10 Isle of Wight by Jim Baldwin

After the paucity of records in 2021, due to a number of mitigating factors, it was pleasing to see that record submission was back to pre-Covid levels in 2022 with 24 species sighted.

The highlights of the recording season were the third and fourth vice-county records of **Southern Migrant Hawker** and **Red-veined Darter** recorded at a new site. There was also an impressive count of **Scarce Chaser** at Sandown Meadows Nature Reserve.

It was not all positive news, though; in line with the other breeding sites of Southern Emerald Damselfly in England, there were no sightings at Bouldnor this year despite Peter Hunt covering the site regularly, as in previous years. It is thought that the above average water levels of their breeding ponds stopped them from breeding in 2021 (they need the pond to be virtually dry by midsummer) so none survived to 2022. The site will be checked again in 2023 in case of any breeding activity, but it seems possible that we have lost them as a breeding species in the vice-county unless they re-colonise again.

As usual, the first Odonata sighting was a **Large Red Damselfly** at Pan County Park on 10 April with the first **Broad-bodied Chaser** reported at Cranmore on 15 April, the second earliest ever record for the species for VC10.

A Hairy Dragonfly, seen along the Alverstone cycle path on 24 April, was also the second-earliest date for the species for the Isle of Wight.

After receiving no records of Four-spotted Chaser in 2022, it was pleasing to see a newly-emerged teneral at Brading Marshes RSPB reserve on 6 May, the earliest ever date for this species on the Isle of Wight. The same date also saw the earliest ever record of a Scarce Chaser with one reported at Newchurch and another seen two days later at Mersley. There was an excellent count of 23 of this species (21 male, two female) at Sandown Meadows Nature Reserve on 16 June. This site will be subject to a BDS Priority Site Assessment in 2023.

Possibly the star sightings of the year were the two reports of **Southern Migrant Hawker**. Two males were reported at Brading Marshes RSPB reserve on 2 August by the assistant warden with further sightings of single males on 8 and 11 August, thought to be the same individuals. A male was also seen flying in off the sea at Wheelers Bay on 5 August.

For the third consecutive year, the number of reports of **Red-veined Darter** were low. There were only two records from the Atherfield reservoirs where breeding has been reported in the past. A male was present on 18 June and two males seen on 8 July. On the latter date, two males were also seen and photographed in the garden of a beach hut at Seaview which adjoins the

Hersey Nature Reserve. This is a new site for the species. The final record of the year was a female at Wheelers Bay on 21 July.

The fragile **Keeled Skimmer** population along the slipped cliffs at the southern end of the Isle of Wight were recorded in small numbers between St Catherine's Point and westwards to Whale Chine.

The final record of the year was a **Common Darter** which was seen and photographed at Corf on 1 December. This is the latest ever record of a dragonfly on the Isle of Wight.

Grateful thanks to all who submitted records in 2022, especially: Andy Butler, Pete Campbell, Luke Gaskin, James Gloyn, Val Gwynn, Allan Jackson, Nikki Kownacki, Keith Marston and Iain Outlaw whose records and photos were used in the preparation of this report.



Large Red Damselfly-Allan Jackson



Scarce Chaser Brading Marshes- Luke Gaskin



Red veined darter female revetment wheelers bay, Andy Butler.

VC11-12 South & North Hampshire by Phil Young

Of the 32 different species recorded in South Hampshire this year the highlight was the discovery of a female **Winter Damselfly** on 5 May by Terry Crow at Wildern LNR, an urban wetland reserve in Hedge End, near Southampton. This is only the second record of this species in the UK.

The only other vagrant/migrant species recorded in 2022 was a male Lesser Emperor seen on 10 and 14 July at Hengistbury Head, near Christchurch (probably the same individual). Thanks to the active local survey team the list for Hengistbury now totals 24 potentially resident species plus two migrant species. New species sightings this year were of Willow Emerald Damselfly, and a single male Black Darter seen on 14 September at the Lily Pond. Keeled Skimmer was first seen at Hengistbury last year and was spotted again this year on 27 June.

On the 7 June a lone male **Brilliant Emerald** was photographed by Paul Bamford on the wing at Wyndham's Pool on Yateley Common in the northeast of the county. Two adults were also recorded in 2018 at this site, which is about 5km from the established site for the species at Warren Heath, both sites being part of the same remnant of acid heathland in North Hampshire.

Another species seen this year at Wyndham's Pool was Willow Emerald Damselfly. First recorded in North Hampshire in 2019 at Bramshill Plantation in two adjacent 1km squares, this species is gradually spreading around the vice county. In 2020 the species was again seen in two 1km squares making its first recorded appearance at Wyndham's Pool and also at the Long Bottom pool near Caesar's Camp. In 2021 it was recorded in four 1km squares, consolidating its presence in the northeast of the vice county, including at Hartland Country Park, near Southwood, but also extending its recorded presence far to the west of the vice county at Anton Lakes, near Andover. Now in 2022 it has been recorded in seven 1km squares, while maintaining its presence in the northeast and west of the vice county it has also been spotted further to the southwest at Alton Flood Meadows.

There was evidence of the further establishment of **Willow Emerald** in South Hampshire as well. In 2021 it was seen in only two locations: Ebblake on the Dorset border and at Titchfield Haven. In 2022 it was again seen in two areas but with a wider spread of records. Firstly, it was spotted on both sides of Southampton Water and north as far as Testwood. The second group of sightings were at Hengistbury Head and at Cowards Marsh in the Avon Valley. I suspect that this species may be present at a number of other sites in South Hampshire which have not been graced by the diligent recording carried out at the sites mentioned.

Hartland Country Park and the adjacent Southwood Woodlands, previously not surveyed, have yielded a surprising list of 15 species in just two years of investigation by Mary Thompson. Species seen include Small Red Damselfly, Emerald Damselfly, Black Darter, Four-spotted Chaser and both Keeled Skimmer and Black-tailed Skimmer. Some, no doubt, will turn out to have been dispersing individuals but this is a good example of what can be found by exploring your local woodland.

Last year saw the discovery of two populations of **Southern Damselfly** on the River Test, one along its lower reaches near Totton and the second on the northern boundary of the vice county at Stockbridge Marsh. Both populations have been confirmed by

further surveys in 2022. David Murdoch has been busy this year surveying the upper reaches of the Test and I understand that further discoveries have been made. Although records are yet to be submitted I understand that a publication is to be expected. The species seems to be holding its ground along the River Mude on the northern outskirts of Christchurch, with reasonable numbers observed on several visits made in late May and early June. Continued presence of the species at its traditional site in the Itchen Valley was confirmed by visits to the Country Park in mid-May by Tony Mundell (while conducting a botanical survey) and in late June by Terry Crow. The New Forest has long been recognised as a stronghold for **Southern Damselfly**. Visits by a number of observers in 2022 recorded its continued presence at well-known sites such as Crockford Stream, Latchmore Brook and Ober Water / Mill Lawn Brook, as well as at a number of lesser known locations.

White-legged Damselfly is another species that has historically been associated with Ober Water. While it had been recorded in good numbers from the Black Water in 2020 and 2021, there were no records for the species from the Ober Water since 2019. A BDS field trip to Ober Water, on a hot and sunny 5 July day, was able to confirm its continued presence in good numbers. A total of twelve species were seen with counts in the hundreds for both White-legged Damselfly and Keeled Skimmer. Those present were delighted to be able to see large numbers of female White-legged ovipositing, each in tandem with an attendant male. On an earlier visit to the same site about ten days previously, on an overcast day, large numbers of teneral White-legged Damselfly were observed roosting in stands of Bog Myrtle a few metres away from the stream.

Scarce Chaser maintains its presence along the river systems to the east and west of the New Forest. It was observed in the Lower Test Valley on many occasions between late May and early July, including four individuals seen near Nursling Substation on 21 May. On 10 June more than five were seen along the River Mude near Christchurch. The Avon Valley (and its tributaries) yielded the usual spattering of records including three adults seen at Furze Hill Farm on 22 May and a female seen on the same day in a back garden to the west of Fordingbridge (again near to a tributary stream of the Avon). To the southeast of the New Forest "2 or 3" adults were observed on 16 June at Mopley Pond, another new site for the species, where it was also seen in 2021 according to unrecorded reports.

Many thanks to all the observers who submitted records of sightings during the year. Our ability to monitor the health of dragonfly populations is dependent upon such submissions whether they are from occasional sightings, from regular recording of a particular site throughout the year or from a wide ranging investigation of numerous sites throughout the county. Special mention this year must go to Steve Hewitt who submitted an amazing grand total of 967 records across 67 different 1km squares.



Male Brilliant Emerald at Wyndham's Pool, Paul Bamford



Looking for White-legged Damselfly at Ober Water © Steve Cham

VC13 West Sussex VC 14 East Sussex by Simon Linington

A total of 2,165 Odonata records for Sussex were submitted in 2022 for verification by 319 observers, of which just 24 submitted half the records. Additionally, a further 1,261 records from previous years were submitted. Sightings below relate to adults unless stated.

The first 2022 sighting was of a Large Red Damselfly on 7 April at Wych Cross (Hew Prendergast). The 20-year average first date for the species in Sussex is 11 April (earliest 1 April). Another seven species were seen on the wing before the end of April. On 13 May, Common Clubtail appeared away from usual habitat, at Burton Mill Pond, and next day six tenerals were seen at Fittleworth. An early Emerald Damselfly was at Weir Wood Reservoir on 31 May. Most Sussex species are stable or increasing but this one is of concern and was recorded in just seven 1-km squares in 2022, half the number of 20 years ago; furthermore, the maximum site count was only 20. By contrast, the Small Red-eyed Damselfly thrives and there was an impressive count of 500-600 at Sheffield Park on 23 June.

Of heathland specialists in Sussex, **Keeled Skimmer** was recorded at Balcombe, away from its usual Ashdown Forest haunts, but there was just one sighting of **Black Darter** (at Old Lodge on 5 August). The hot 2022 summer dried out many heathland ponds and wet flushes. If this becomes a regular occurrence, the future of Black Darter within Sussex looks bleak.

Samantha Crocker found the only **Red-veined Darter** of the year at RSPB Broadstone Warren on 21 June, and David Sadler found the first **Southern Migrant Hawker** on 19 July at Southease, where drying ditches resulted in fewer sightings than usual, though it was seen at six other locations.

The single small colonies of **Norfolk Hawker** and **Scarce Blue-tailed Damselfly** survived into 2022 but the future of the Damselfly at Sompting Brooks is doubtful. David Sadler found seven (including an ovipositing female) on 19 May but only one second brood individual on 4 August. The Norfolk Hawker colony looks less precarious and Peter Hughes reported at least 10 adults along the Chichester Canal on 15 June. Singles were also seen at RSPB Broadwater Warren (12 June), Hooe Level (24 June) and the River Brede (14 July).

Up to three **Lesser Emperors** (including a pair in tandem with the female ovipositing) were at the regular West Langney Lake (Eastbourne) site in late July to early August. A male was also sighted at Sheffield Park Gardens on 29 July. Intriguingly, a larva was found at a pond on Seaford Head by Mike Kerry on 27 June and kindly verified by Charles Gauci from Malta.

A male **Vagrant Emperor** was found by Brian Cox at Iford Brooks on 18 November, bringing the year's species total to 36, with half of the records

accounted for by seven species. One of the latter is **Willow Emerald Damselfly** which continues to increase meteorically, going from one up to 132 1km squares in just six years. Polly Mair is thanked for many records of this Damselfly's egg-laying scars. Final year sightings, all in November, comprised of: **Southern Hawker** (14th), **Migrant Hawker** (18th) and **Common Darter** (25th).

In 2022, further improvements were made to the Sussex Dragonfly Group's website (https://sussexdragonflies.org.uk/) and two small field events were held: a training session for South Downs National Park volunteers on 30 July and an event organised by Natural England for mobility scooter users at Kingley Vale NNR on 10 August.



Black Darter at Old Lodge-Simon Linington



Vagrant Emperor on Iford Brooks- Brian Cox

VC 15 East Kent VC 16 West Kent by Marc Heath

2022 proved to be a very hot year with some species doing rather well but, unfortunately, others not faring so good. The first Large Red Damselfly was seen on 14 April in Tenterden followed shortly, a few days later, by Hairy Dragonfly at New Hythe.

A Downy Emerald was seen on 21 April at Scotney Castle, and the first Blue-tailed Damselfly was on the wing on 23 April at Nethergong. Azure Damselflies and Variable Damselflies appeared the same day at Westbere Lakes. The end of April saw Red-eyed Damselfly on the wing at Westbere; nearby, the first Broad-bodied Chasers were emerging on 7 May at Nethergong. Westbere also had Scarce Chaser on 9 May, and the first Norfolk Hawker was seen at Nethergong on the 22 May.

50 **Dainty Damselflies** were seen on the 2 June; two counts during the month resulted in a total of 140. Although there seems to have been slightly lesser numbers this year, the good news is that they have successfully bred elsewhere at Sandwich Bay where 50 were recorded. Hopefully they will continue to expand their range in the area.

The first **Red-veined Darter** was seen on 9 June at Sandwich Bay; at Oare Marshes, Faversham, a new **Dainty Damselfly** colony was found with over 200 counted on 11 June along with 10 **Scarce Emerald Damselfly** nearby on the reserve. This is superb news for the species which is also probably to be found elsewhere on the north Kent coast.

23 **Norfolk Hawker** were seen at Westbere on the 16 June, while at Bough Beech, on the 18 June, the first **Willow Emerald Damselfly** was seen. Also on this date, up to four Norfolk Hawker were seen at Dungeness, including a mating pair.

A good look at the Stour Valley on the 21 June produced a count of 64 Norfolk Hawker and 20 Scarce Chaser, whilst at Marden, a Golden-ringed Dragonfly was seen.

On 22 June, as was a Lesser Emperor at Dungeness.

A Brilliant Emerald was seen at Bough Beech on 4 July, and two Lesser Emperor were noted near Cliffe. Lesser Emperors continued to do well this year; 10 were seen at New Hythe. However, Southern Emerald Damselfly and Southern Migrant Hawkers seemed to have a disastrous year with only a few records received. No doubt the hot temperatures dried up their breeding pools; fingers crossed that 2023 sees them returning. The 29 July provided three Golden-ringed Dragonflies sighted near Sissinghurst, whilst Willow Emerald Damselflies emerged at a number of sites in Kent on the same date; seemingly, numbers were lower at most sites compared to 2021. The end of the year ended on a high when a superb Vagrant Emperor was found on the 28 November at Bedgebury.



Dainty Damselfly copulating- Marc Heath



Golden-ringed Dragonfly male- Marc Heath

VC 17 Surrey By Linda Pryke

A total of 33 species were recorded in Surrey in 2022: 20 Dragonflies and 13 Damselflies. Thanks to everyone who submitted their records during 2022. (Older records always welcome too at any time).

Dragonflies

As ever, the top four formed the bulk of the records, Common Darter followed by Emperor, Southern Hawker and Migrant Hawker.

Norfolk Hawker were observed at a new location. In addition to the regular WWT London Wetland Centre sightings, a single adult appeared on Wimbledon Common on 5 July, recorded by S. Riley. The photograph by R. Ing shows it rather camouflaged on a gorse bush.

After a couple of sightings in 2020 and 2021 Scarce Chaser failed to put in an appearance at Tices' Meadow this year, but 2 males were seen by S. Harley 2km to the north, and a single male at Churt Common (S. Riley). This species has a two year lifecycle, so it'll be worth looking out for between May and early August.

Damselflies.

12 species of damselfly were as expected for the county, the bulk being Azure Damselfly, Common Blue Damselfly, Banded Demoiselle, Large red Damselfly and Willow Emerald.

Rather fittingly, Damselfly 13 on our list seen and photographed near Epsom Common proved to be a bit of a puzzle, and the subject of much discussion amongst groups on Facebook. The less common emerald species can be tricky to tell apart from the Emerald Damselfly *Lestes sponsa*, even with photographs, but the consensus was (aided by John Curds' annotated photos) that it was a female Scarce Emerald Damselfly *Lestes dryas*, for which there is only a single record for the county (Near Oxshott in June 1916). The record was posted on iNaturalist, with no background information, but if 'Matt Varnish' would like to get in touch it would be great to hear from them!

Habitats

Work has started on the upgrade to the A3 interchange on the M25 at a cost of £317 million, scheduled to last until 2025. I expect this will make access to Bolder mere Lake and adjacent heaths a bit tricky at times. The National Highways website has updates and some interesting fact sheets on whats' planned in terms of biodiversity and enhancements. Dragonfly highlights there include Hairy Dragonfly and an on-off population of Black Darter.

On the plus side, following the devastating fire at Thursley Common NNR the boardwalks have been replaced, and once again open to visitors. Along with the marvellous array of dragonflies you may spot one of an active team of

volunteer wardens (organised by the Friends of Thursley Comon and Natural England), particularly at weekends.

Field trips

If you'd like some like-minded company, the Hampshire, Surrey and Berkshire Group (newly extended from Hampshire & Surrey to accommodate Berkshire) maintains a newsletter via email (contact David Hepper), and an excellent programme of group field meetings are listed on the BDS events page. You don't need any expertise- It's a friendly, relaxed group with a welcome for all skill levels.

Personally I hope to be out and about as much as I can. Among other things I'll be carrying-out regular surveys on the ponds & wetlands of Elmbridge Commons SSSI and nearby sites to supplement the work of the Rangers. If you are local and would like to get involved, do get in touch.

Also do feel free to contact me about any queries of dragonfly related things, whether it's a site you'd like a bit of help exploring, or perhaps an identification query. If I can't help directly, I may be able to point you towards someone who knows.



Norfolk Hawker by R. Ing

VC20 Hertfordshire by Roy Woodward

In 2008 the Hertfordshire Natural History Society published 'Dragonflies and Damselflies of Hertfordshire', mapping the distribution of Odonata in the county by tetrad, following six years of survey work between 2000 and 2005.

When the atlas was published, 31 species had been confirmed to have occurred in Hertfordshire, with 19 of these likely to be breeding, and 22 recorded during the survey.

Several new species have spread into the county in more recent years, bring the Hertfordshire total to 37 species. So, 2022 saw the start of a new atlas project to properly update species distributions, with the survey planned to run until the end of 2027.

With several scarce species found, 2022 ended with a remarkable 30 species recorded, with the majority of these potentially breeding.

Lesser Emperors had a good year with sightings from six localities in addition to the now annual records from Hilfield Park Reservoir. This is now a species that may occur anywhere in the county and is likely to increase during the next few years.

Two other species apparently on the verge of becoming better established in Hertfordshire are **Beautiful Demoiselle**, which was reported from several sites, mainly in south and west Hertfordshire, and Downy Emerald, which was found in reasonable numbers at Frogmore Lakes, as well as being seen at Hilfield Park Reservoir.

Norfolk Hawkers (or Green-eyed Hawkers), are now firmly established in the Lea Valley, south-east Hertfordshire, and are increasingly dispersing to nearby areas, with records from 15 tetrads during 2022. In contrast, although Scarce Chaser, has maintained a presence in the Lea Valley, and on the Grand Union Canal near Wilstone, the only report from elsewhere this year came from Hilfield Park Reservoir where a male was seen on 15th June.

A male **Keeled Skimmer**, photographed on the River Colne at Colney Heath on 21 June becomes the third verified county record in recent decades. In addition, at least two male **Southern Migrant Hawkers**, were present in the Hertford Heath area for several days in the second half of July. Although currently an irregular visitor, this is another species that might become more frequent in Hertfordshire in the near future, and may become permanently established.

The best find of the year came fairly late in the summer when a male **Scarce Blue-tailed Damselfly**, was photographed at Kingsmead on 24 August. This is a species that had previously been recorded only once in Hertfordshire, as long ago as 4 August 1948, when a single male was found at Waterford Heath.

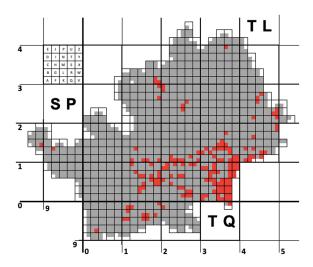
On 26 an ovipositing female Scarce Blue-tailed Damselfly was found at Kingsmead, and over the next few days observers saw three or four different males and probably at least two females. With luck, this may be the beginning of a viable colony, and another breeding species for the county.

On a more negative note, only two male **Scarce Emerald Damselflies**, were reported from Hertford Heath, with none reported from elsewhere, and there were also very few reports of **Common Emerald Damselflies**, from anywhere in the county.

As the new atlas project progresses, maps showing the tetrads where each species has been recorded will be added to the Hertfordshire Natural History Society website (hnhs.org). All records during the next five years will be valuable for the project, which will cover both the modern county and the vice county, but as the majority of records currently being come from the south-east part of Hertfordshire, observers from the northern and western parts of the county are especially encouraged to submit their records. Please get in touch if you have any questions.



Scarce Bluetailed Damselfly. male by Barry Reed



Hertfordshire monads with at least one dragonfly or damselfly species recorded during 2022

Hertfordshire 2022 records

VC22 Berkshire by Des Sussex

By December 31 2022 we had 4000 dragonfly records verified for the year for VC22. Many records include details of breeding behaviour, showing that we have plenty of sites achieving the targets for Priority Site status (https://british-dragonflies.org.uk/recording/priority-sites/). A few recorders were extremely busy: at least four people entered 300+ records. 33 species were seen in total in 2022: 15 Damselflies and 18 Dragonflies.

The notes below focus on the modern county of Berkshire; for details on the Oxfordshire parts of VC22 see the VC23 report.

The drought and heatwave produced mixed blessings for both dragonflies and recorders. We had some super weather to be out enjoying wildlife, but some of our favourite ponds and heathland pools dried up. It will be interesting to see how the flora and fauna at these sites 'recover' in 2023.

The 2022 highlight was the Scarce Chaser – details in the VC23 report.

Almost as exciting for (at least) seven other recorders was the finding of **Lesser Emperors** in July. They were seen at: Fifty Acre Piece, Lavell's Lake Nature Reserve, and Padworth, and a number of sightings came fromt Hosehill Lake LNR.

We are lucky to have a lot of great sites in VC22 with at least 20 Priority Sites of National Importance, and another 10+ sites of Local Importance, most with public access. So enthusiasts have plenty of choice of places to visit. The five sites contributing the most records in 2022 were: the River Thames (326 records), Buckler's Forest (253), Radley Lakes (194), Moor Green Lakes (170) and Parsonage Moor (154). Some good sites are somewhat overlooked; only three people sent in records from BBOWT's Wildmoor Heath NR, and only two people sent records from Englemere Pond LNR, the latter being an SSSI designated for its dragonfly assemblage.

We had 22 records of Common Clubtail from the 'VC22 bank' of the Thames. Most were from upstream of Goring, but the most notable spot was well downstream at Cookham. We need more people looking for Common Clubtail in and downstream of Reading. There was a good crop of 85 records of White-legged Damselfly, including a cluster of sightings from the Thames upstream of Hurley, and a good batch of records from Paice's Wood near Aldermaston.

Scarce Blue-tailed Damselfly continued to be found in encouraging numbers at Buckler's Forest and at Fifty Acre Piece. It will be very interesting to see how the populations respond to the summer drying up of many ponds in the county- will Scarce Blue-tailed be one of the winners or losers? The species was also seen at two sites in Didcot (see VC23 report).

Just 11 records of Variable Damselfly was a disappointing return for this species of high conservation concern. Fortunately some of the records from the Cookham 'meta-population' were of good numbers with 2 counts over 60. It was also seen at the Burghfield river/canal/gravel pits complex and there were

single records from Barton Fields and Radley Lakes south - we do need more recorders actively surveying for this little beauty.

It was quite a good year for **Brilliant Emerald** with 10 different recorders lucky enough to find this often elusive gem. Records were from sites along the southern and south-eastern fringes of Berkshire. It was seen at nine locations in Swinley Forest, with the unlikely looking breeding site Forest Pond (close to The Look Out car park) once again being a fairly reliable spot to see it. It was also seen at Heath Pool (Simon's Wood), and further west at Paice's Wood and private ponds at Wasing.

Only six people saw **Black Darter** this year, and of the 11 records, eight were from the 'Mortimer' sites, with only three from the 'Swinley Forest and Brick Pits' sites. We need more of you doing late summer surveys for this species.

There was another increase in records and sites for Willow Emerald Damselfly, with many people contributing to the 73 records of adults or egg laying scars.



The heatwave and drought saw many wetland become drylands. Here is one of the dried up ponds at Buckler's Forest- Nick Percival



An unexpected mixed species pairing of Small Red and Emerald damselflies by Alan Holmes.



A Hairy Dragonfly egg laying at Moor Green Lakes Nature Reserve in the Blackwater Valley by Alan Holmes.

VC23 Oxfordshire by Stephen Burch

This report covers the full ceremonial county of Oxfordshire, including the Vale of White of Horse, which is part of VC22. The unprecedented heat wave and drought caused a few sites, mainly stormwater ponds and some chalk streams, to dry up but most others retained at least some water and overall there did not appear to be a major impact on numbers or species diversity and activity was often high in the hot conditions.

The dragonfly season got off to a slightly earlier start than in 2021, but by the end of April there had been just a few records of Large Red Damselfly. There were only five records of Common Clubtail from the VC23 bank of the River Thames, but this may have been due to lack of observer coverage as more came from the VC22 bank. The total number of records for Oxfordshire was 24, dating from between 5 May and 15 June. This year, there were no sightings further upstream than Port Meadow (Oxford). Another early season speciality, which is of national conservation concern, the Variable Damselfly, may be vanishing from the county as it was only recorded once, from the Barton Fields/Radley Lakes area. This site has become overgrown and was largely inaccessible, so it is possible more remain here.

There were however good numbers of **Downy Emerald** seen, including at two sites in the north of the county (Rousham Lakes and Barton Abbey Lake) where they were found to be thriving after a gap of almost 20 years in observer coverage. An amazing total of 10 was found in one visit to Rousham Lakes!

Sightings of **Scarce Chasers** along the River Thames north of Shillingford was a major highlight for 2022. The male initially reported was only the third confirmed record in the county, and the first to remain for more than one day. The resulting influx of observers led to the discovery of a second male, with a female possibly being seen as well, which was plausible given that the males showed evidence of copulation.

Following their discovery in 2020, Scarce Blue-tailed Damselflies were again seen at the stormwater pond on Longford Park, Banbury. Last year, a new site was discovered many miles to the south in Didcot, at another stormwater pond. In 2022, this species was also found at an additional, more accessible, stormwater pond nearby in Didcot.

Unfortunately, **Southern Migrant Hawker** may be disappearing from Otmoor following their discovery in 2020. Smaller numbers seen in 2021 and in 2022, only two records of mature adults were received, possibly due to the prevailing drought conditions.

The Cothill BBOWT (Berks, Bucks and Oxon Wildlife Trust) site transect surveys produced an amazing peak daily count of 425 Southern Damselflies at Parsonage Moor, compared with a previous maximum of 164 (last year). There were also good numbers of **Keeled Skimmer** seen; clearly BBOWT's careful on-going habitat management is producing ideal conditions at this reserve.

Following the appearance of **Keeled Skimmer** at the Lye Valley LNR, Oxford in 2020, a new colony maybe becoming established with a peak count of 10 this year.

Mid-summer there were two highly probable sightings of **Lesser Emperor** at Radley Lakes. This species remains a very rare visitor to the county, despite good numbers elsewhere in the country.

Small Red-eyed Damselfly continued its recent spread, with records from 17 sites all across the county. The highest total of around 70 was again found at a Grove stormwater pond.

A late-season highlight was the dramatic spread of Willow Emerald Damselfly, with sightings much earlier and later in the year than previously. The total number of sites occupied increased from 6 last year to around 26 this year, spread across the county from near Banbury to the north, to Faringdon in the far south-west.

The last record was of a **Common Darter** near Cholsey on 25 November. Over the year, 30 species were seen in Oxfordshire, including the very probable Lesser Emperor.

2022 saw the publication in Issue 10 of the journal Fritillary of a detailed paper on the Dragonflies of Oxfordshire, authored by the VC23 recorder. This can be downloaded from:

https://anhso.org.uk/special-interest-groups/fritillary/fritillary-10/.

Further details on sightings for the year can be found at: https://oxondragonflies.blogspot.com/.

VC25 & VC 26 Suffolk by Adrian Parr

Perhaps partly reflecting the drying out of several shallower waterbodies during the drought of summer 2022, the dragonfly year in Suffolk was far from a classic. Although, pleasingly, over 2800 records were received from both regular and more casual recorders; as usual, VC25 (East Suffolk) saw better coverage than VC26 (West Suffolk). The following report picks out some of the year's highlights.

Norfolk Hawker is clearly continuing to do well in the county. Not only were there records from strongholds such as the Lower Waveney Marshes and Minsmere but, as in 2021, there were again sightings from pretty much all along the coastal strip. Further inland, a sighting at Hinderclay Fen on 25 June complements records in 2016, 2018 and 2020 from nearby Redgrave & Lopham Fen, and a small breeding colony may now be present in the valley fens associated with the headwaters of the Rivers Little Ouse and Waveney. Similarly, in the far west of the county, the species was also seen at Lakenheath RSPB Reserve, with a record also on 25 June. This complements individuals seen there in 2018 and 2020, and again it may be that a small breeding colony is now present.

Southern Migrant Hawker maintained a breeding foothold in the south-east of the county, with immature males being noted at Trimley Marshes and in a nearby suburban garden on 26 June, these records then being followed by sightings of more mature individuals over the next five weeks or so. Immatures were also noted at Sudbourne, with more mature adults being seen near Newbourne, at Landguard Bird Observatory, at Hollesley Marshes and at Sizewell. There was thus a reasonable showing in the county during 2022, though less so than in 2021 when, in particular, there were also records from the fens of the River Little Ouse/River Waveney headwaters area.

Lesser Emperor again appeared at Loompit Lake, where it has been seen in five of the last six years, and an established breeding colony is seemingly now present there. Further north, sightings for the third year in a row at Carlton Marshes might similarly indicate another breeding colony. The species also turned up at North Cove on the Suffolk/Norfolk border, at East Lane near Bawdsey and an individual seen at Lackford Lakes on 17 July represents the first ever record for West Suffolk.

The White-legged Damselfly's strongholds in Suffolk are along the River Stour, which forms the county boundary with Essex. In 2022 the species was only recorded from three sites along the river – at Clare Country Park, at Foxearth Meadows (the main reserve here lying just in Essex) and near Flatford. Particularly with a few records from regular recorders still to come in, it is difficult to say whether this represents a decline in the species' fortunes, or is simply a reflection of observers' efforts having largely been focussed elsewhere at critical times. But it does seem this species is one to start keeping a close eye on.

The Suffolk coast generally does well for migrant species, but events in 2022 were rather mixed. Very few records of **Red-veined Darter** were received, though three were present at Thorpeness on 9 June. In addition to the Lesser Emperors that appeared in the county, a **Vagrant Emperor** was also noted at Kessingland on 12 November. The migrant highlight of the year was, however, the discovery of a male **Scarlet Darter** at Minsmere on 28 July. This represents only the twelfth British record, though the species is a potential colonist.

It will be of considerable interest to see what 2023 has in store for the county. Hopefully the partial or complete drying out of various waterbodies during summer 2022 will not have damaged dragonfly population levels too severely. Fortunately many insects can quickly recover from a poor year, so long as conditions are favourable.

VC27 & VC28 Norfolk by Pam Taylor

2022 was a fairly uneventful year in Norfolk. Migrant reports were down on 2021 but, by way of contrast, some resident species had an excellent season. The first adult sightings of the year didn't come in until mid-April with Large Red Damselfly appearing at Sculthorpe Moor on 13 April and at both Sutton Fen and Broadland Country Park the following day. The last sighting of adult Large Red Damselflies also came from Broadland Country Park on 1 August. However, Derek Longe topped and tailed these records by photographing larvae of this species from his garden pond in both March and October/November.

I received over 200 records of Willow Emerald Damselfly with the first adults seen at Potter Heigham on 2 July and the last at Whitlingham Country Park on the edge of Norwich on 12 November. Sadly I received little over 100 records for the supposedly commoner Emerald Damselfly. Between late May and early August there were 36 reports of Scarce Emerald Damselfly with most coming from Broadland Country Park, the Roydon Common and Grimston Warren complex, East Winch Common or Thompson Common. There was also an isolated sighting at Shotesham in mid-July. I received just one report of Southern Emerald Damselfly in 2022. Unusually it came from a site in West Norfolk where a female was photographed on 2 August. I'm unaware of any being seen at the more usual site of Winterton Dunes on the east coast during 2022.

Small Red Damselfly was once again seen at Scarning Fen, but all sightings were in low single figures. It faired fractionally better at the vulnerable West Norfolk site, but again all sightings were in single figures. Scarce Blue-tailed Damselfly, another county rarity, was seen at three sites. At its main current stronghold in West Norfolk numbers peaked across the site at over 100 during June. A single sighting also came from Dersingham Bog on 7 July. In East Norfolk a new site was confirmed with three sightings between 23 July and 21 August, however only one individual was identified on each occasion.

Moving on to our larger dragonflies, both Norfolk Hawker and Brown Hawker had exceptionally good years. Strongholds for Norfolk Hawker remain in the broads, but there are now sites where it may be seen throughout Norfolk, north-east of a line from Beccles to the Wash. There were also sightings in 2022 from Roydon Common, Foulden Common and the established colony at Redgrave and Lopham Fen. Strangely, there no reports from Thompson Common or Thompson Water, although I'm sure the colony there still exists. As in 2021, just one sighting of Common Hawker reached me. A single individual was seen at Ludham Marshes, a known site, on 30 July.

For the third year in a row **Southern Migrant Hawker** was seen at both Thompson Common and Winterton Dunes. It was also present for the fourth successive year at East Winch Common. In north Norfolk a small colony may be establishing at Burnham Overy marshes, where there were sightings for ten days in August, including pairs seen on both 5 and 15 August. One was present at Kelling Water Meadows on both 25 July and 2 September. This is a good area for migrant species, with **Red-veined Darters** now established at the site. A single Southern Migrant Hawker was present at Cley between 18th and 29th July,

while others were seen at Titchwell on 2 August and Grimston Warren on 21 August.

Lesser Emperors were seen at no less than nine Norfolk sites in 2022. Most records, as usual, came from the Trinity Broads area, especially Filby Broad and Ormesby Little Broad, where the species was present for a ninth consecutive year. Other sites were Winterton Dunes, Sparham Pools, Snettisham, Selbrigg Pond, Burnham Norton, Carlton Marshes, Hickling and Great Yarmouth. There were just two sightings of Vagrant Emperor with individuals seen at Wells on 18 October and Blakeney Point on 4 November. There was no repeat of the influx seen in 2021.

Away from its main Norfolk colony and satellite sites to the north-east of Norwich, **Downy Emerald** was seen at two locations in Sutton Fen, a site with restricted access, on 27 May.

Keeled Skimmers continue their range expansion across Norfolk with scattered sites now appearing right across the northern half of the county. As mentioned already, Red-veined Darters were once again present at Kelling Water Meadows, while others were also seen at the coastal sites of Beeston Regis and Winterton Dunes.

My sincere thanks to everyone contributing records for Norfolk in 2022. The overall number of sightings was well in excess of 7,000 records. You can either enter your sightings directly into iRecord or, if you record regularly at one or more sites, you can email me at pam.taylor@british-dragonflies.org.uk for a spreadsheet that contains all the required data entry columns in the order necessary for me to upload easily to the national database.



Norfolk Hawker, female Banded Demoiselle and Scarce Chaser on the same plant stem at Overcote, River Great Ouse by Val Perrin.

VC29 Cambridgeshire VC31 Huntingdonshire by Val Perrin

Dragonflies and Damselflies had a very good season in 2021, with a good range of species showing across the two vice counties, and over 1000 records being received and verified in iRecord. Concentrating on the more interesting records, Norfolk Hawker showed at several sites where it had been seen in previous years, including Wicken Fen NNR, Fen Drayton lakes RSPB and at Overcote along the River Great Ouse, a short distance from Fen Drayton. There was also a possible sighting at Kings Dyke NR, Whittlesey, in the north of the county.

Willow Emerald was recorded from many parts of the county. As well as its well-known nature reserves, the Damselfly turned up at a number of new locations, including two private Cambridge gardens, and at Jesus College pond in the centre of the city. The total number of Willow Emerald records easily surpassed those for the supposedly commoner Emerald Damselfly.

There are a number of scattered sites for Variable Damselfly in Cambridgeshire and in some of these the insect can be quite plentiful. In 2022 records came from Fen Drayton, Wicken Fen and Willingham, plus new records from Kings Dyke and one at Rings End, Whitemoor. By contrast White-legged Damselfly continues to be a rare species here, with usually just singletons being seen. This was certainly the case at Barrington and Swavesey; there was also a new record of one behind a garden centre at Shepreth. More were apparent at Fen Drayton, but at Overcote, a reliable recorder assessed the numbers along the river bank to Webbs Hole sluice to be of the order of 21-100. In fact this proved to be an excellent site for a very wide range of species this year.

Following the colonisation of the county in the early years of this century, records for Small Red-eyed Damselfly were very modest this year. Observers reported them from Fen Drayton lakes, Quy Fen, Wicken Fen, Byrons Pool, Grantchester on the River Cam, Fowlmere RSPB, Northstowe, Swavesey and Webbs Hole sluice. The lakes at the new development of Northstowe, just north of Cambridge, are proving to be very promising for Odonata, with most, if not all the resident Cambridgeshire species now present. In addition a male Lesser Emperor was seen and photographed here on 23 July. Another recent English colonist, Southern Migrant Hawker, was again reported at Quy Fen, where it has now been seen regularly over the last few years and must almost certainly be breeding. However, this proved to be the only site in the county where the species was seen in 2021.

Val Perrin



Norfolk Hawker in flight at Paxton Pits by Val Perrin.



Male Banded Demoiselles displaying on the River Cam near Byron's Pool by Val Perrin.

VC30 Bedfordshire by Rory Morrisey

It has been an interesting year for Bedfordshire Odonata. Most resident species did well and the scarcer ones were seen more often this year than last. We even had sightings of **Scarce Blue-tailed Damselfly**, which had not been recorded in the county since it was seen at Sundon Quarry in 2003.

Beautiful Demoiselle appeared in three locations, with a small maturing group in Holcot Wood. We are hopeful that we will find somewhere that it is breeding in Bedfordshire.

Norfolk Hawker (or Green-eyed Hawker) was seen ovipositing at Felmersham GP and at the St Neots Skate Park, which is just inside Bedfordshire VC30. **Variable Damselfly** was seen emergent at Felmersham GP and in quite large numbers at a new site at Willington Daisleys Lake, where it was also seen emerging.

Keeled Skimmer was again seen at Sundon Quarry with evidence of breeding there. Remarkably, a single male **Scarce Blue-tailed Damselfly** was seen there as well as a single female with signs that she may have been ovipositing. We remain hopeful that this species will return to our county.

Downy Emerald was present at King's Wood, Heath and Reach and at Sandhouse Lane NR; the latter provided views of a copulating pairs and ovipositing females. There was a very late record of a single male Downy Emerald at Studham on 16 August.

Willow Emerald Damselfly did well again and could be seen at a number of new sites.

The latest sighting this year was of a **Common Darter** at the RSPB Sandy.

Lesser Emperor turned up in small numbers and a pair was seen ovipositing at Broom GP. Two male **Southern Migrant Hawkers** were at the Marston Vale Millenium Park for two weeks at the end of July and beginning of August, but no females were spotted.

The number of confirmed breeding species in VC30 now stands at 24 with this year's addition of **Variable Damselfly** at Willington.

VC33 & VC34 Gloucestershire by Richard Mundy

A total of 573 records of 27 species were received and accepted from 106 observers in 2022. Records were dated from 16 April, a Large Red Damselfly at Woodmancote, to 12 November, a Common Darter at Gloucester Services on the M5. Perhaps, surprisingly, considering the mild autumn weather there were few exceptionally late records of adults were received, but single Banded Demoiselles at Ryeford on 25 September, and at Barton-on-Severn on 11 September were unusual.

Probably the most exciting news of 2022 was the much-anticipated arrival of Gloucestershire's first Willow Emerald Damselfly, a male, photographed close to the River Thames at Lechlade on 27 August. This is likely to be the vanguard of a forthcoming colonisation as this species spreads west across the country. The Thames, in the southeast corner of the county, seems the most likely location for further records, but the species could also colonise north of the Cotswolds along the Avon and Severn.

Small Red-eyed Damselfly was recorded between 11 July and 27 August, including records from two new sites, two were seen at Tewkesbury Nature Reserve on 2 August and a new colony was found in the Cotswolds (an area where this species is sparsely distributed) at Oddington House, near Stow-on-the Wold, on 27 July.

Hairy Dragonfly was recorded between 9 May and 2 June from typical locations along the Severn and at Cotswold Water Park. A sighting at Highnam Woods on 10 May was an unusual location.

Only two records of **Common Hawker** were received, including a female was photographed at Crabtree Hill, Forest of Dean, on 26 August. A male was photographed some distance outside the known Forest of Dean range, and on the other side of the Severn Estuary, close to Thornbury on 3 September.

Southern Migrant Hawker was recorded at a site near Gloucester for the fifth consecutive year: a male seen on 16 July, and a copulating pair, along with two other males, on 6 August.

Between 11 July and 14 August, there was a series of five records of single Lesser Emperors from three different parts of Cotswold Water Park. There is a long history of records of this species from this area but in recent years these have been mainly from the Wiltshire part of the water park. These are the first records from the Gloucestershire side since 2007 and include the first record from the eastern (Fairford / Lechlade) section of the water park.

There was only one record of **Common Club-tail**, 2 immatures were seen at Apperley on the River Severn on the 19th of May.

Golden-ringed Dragonfly was recorded at several typical sites in the Forest of Dean between 25 June and 10 July. A male photographed at Robinswood Hill, Gloucester, on the 20 June was probably a wandering individual.

VC37 Worcestershire by Mike Averill

2371 records have been received so far for 2022, for 27 species from 143 recorders.

All our regular species were seen in 2022 but, like last year, **Common Hawker** and **Red-veined Darter** didn't show.

Two new species were recorded however, which is pretty unusual in one year; although the Keeled Skimmer was a surprise, the second, the Willow Emerald, has been tracked over the last few years as it moved westwards from the southeast of England. The Keeled Skimmer was only seen in one location, at Ryall near Upton, a site which is an active gravel extraction site that, because of its unique position below river level, has a wonderful supply of water throughout the summer.

After waiting for ages for the first **Willow Emerald** in Worcestershire, suddenly five locations across the east of the county recorded this late season species. A site at Spetchley Park proved popular with this insect and it was seen egg laying in various plants, including Willow.

A species that arrive in the county in 2020, the **Scarce Blue-tailed Damselfly**, had a quiet year in 2022; Ryall Gravel Pit again proved popular with the speciesthe bare early successional wetlands make an ideal habitat for this coloniser.

The Hairy Dragonfly has now been seen three years running in the south of the County; in 2022 this early Hawker was seen at Ryall, Ripple and Croome Park. The finding of an exuvia on the Croome River, Croome Park, by Andy Warr, is much needed proof of breeding; most other sightings have only been of males patrolling. The most noticeable thing about a Hairy Dragonfly exuvia is the unmarked case, lack of lateral spines and it small eyes, compared to other Hawkers.

In 2022 there were just three records for the **Lesser Emperor**: two at Ripple and one at Grimley.

The Scarce Chaser, always gets a mention as a nationally important species and apart from being recorded on its stronghold, the River Avon, it was seen at Ripple and on the Croome River. Once again it was seen emerging at Hillditch Pool, for the eleventh year running and one was even seen out at Mathon, west of the Malvern Hills. The Mathon record was interesting as it is the furthest location west in Worcestershire, but it also made the Herefordshire recorders happy as well as that area is in modern Herefordshire, so gives them a new county species. The other nationally Important species, the Common Clubtail, had a poor year at Bewdley with the lowest total emerging count since 2007. There is no obvious explanation for the low count as both the weather and river conditions were good for surveying. It was quite a low count three years ago so perhaps this year's individuals are the offspring of those, having a three year life cycle.

Look for 'Worcestershire Dragonflies' by typing that name in the Browse all activities search box in iRecord.



Keeled Skimmer at Court Pits by Andy Warr.



Willow Emerald egg laying pair at Warr Spetchley Gardens Lake by Andy Warr.

VC38 Warwickshire by Mick Schilling

VC 38 Warwickshire continues to be watched by a good number of keen enthusiasts submitting regular sightings around the county. These contributions are greatly valued, and my thanks are gratefully extended to those individuals.

Some notable points from the 2022 season:

Banded Demoiselle remain plentiful in many areas, often the most dominant species by a long way along the slower moving rivers. They are often the earliest sightings of the season for many, especially near flowing waters.

Beautiful Demoiselles continue to extend their presence with increasing numbers being seen along the rivers and streams in the county; they are often found mingling with their relative, the Banded Demoiselle.

White-legged Damselfly remains locally common along many of the county's rivers, as well as some still waters too.

Willow Emerald Damselfly sightings were again reported and at a high frequency; most remain in the east and north of the county, but again, as far west as Morton Bagot, near Studley.

Scarce Blue-tailed Damselfly remains absent since 2016 after the loss of its lone known location at a Cemex site.

Scarce Chaser numbers remain steady; their spread along the Avon is now widening to upstream of Warwick.

Common Clubtail are still absent after having been recorded near Marlcliff a few years back. Their preference for mass emergence over a short period means they're easy to miss, so please keep looking if you're in the area in mid to late May.

The first ever record of a Southern Migrant Hawker was reported in August at Clifton on Dunsmore, nearr Rugby, by Paul Banks. This is an extremely exciting record and is hopefully a sign of this species' expansion from the southeast of England

Some notable locations with a good number of species are located within the Heart of England Forest, especially where both still and flowing waters are present - some of which can feature up to 19 different species across the full season.



White-legged Damselfly in tandem by Mick Schilling.

VC39 Staffordshire by Dave Jackson

After the first County record for Willow Emerald Damselfly, which occurred in 2021 when a singleton was photographed on the aptly named Willow Pond, Smestow Valley, on the outskirts of Wolverhampton, no further sightings have yet been reported.

Would observers please look out for more records of **Hairy Dragonfly** after an individual was photographed at Cannock Chase in the Spring.

Scarce-Blue tailed Damselflies are still holding out in a Cow Pond just straddling the border with Cheshire at Mow Cop, and a new fairly strong colony has been found at a sensitive site on Cannock Chase

Black Darters were seen in small numbers at two locations on Cannock Chase.

Banded Demoiselles were reported from a handful of new sites.

Beautiful Demoiselles have been recorded at a handful of sites across the County.

Small Red-eyed Damselflies are still at Doxey Marshes SWT Reserve and Belvide Reservoir, but have gone from the pools at Enville. High water during previous winters left the blanket weed hanging dried-up in the Willows along the edges of the pools, after the levels went back down.

At least ten **Keeled Skimmers** were present on their bog pool at Cannock Chase in August.

VC40 Shropshire by Sue Rees Evans

The flight season launched with Large Red Damselfly taking to the skies on 16 April – one day later than in 2021, and about a week later than the earliest ever Shropshire record.

Four-spotted Chaser followed on April 21 just teo days later than the earliest ever Shropshire sighting made in 2019.

White-faced Darter was then seen on 29 April about a week later than the earliest record. April 29 also hailed the arrival of Variable Damselfly just 3 days later than the Shropshire record, then Blue-tailed Damselfly was recorded on 30 April representing an early sighting two years in a row. Though no new records were set in 2022 relatively mild conditions meant emergence was generally early with six species on the wing in April. In some cases this lead to unusually long flight seasons. Broad-bodied Chaser was recorded early on 29 April (only two other April records exist) and latterly on 10 August 2022. Only a handful of other August records exist for this species, although two very late records have been made historically in September, the latest being 21 September, in 2008. White-faced Darter similarly had a long flight season and was recorded as late as 6 Aug 2022. August records are very rare with one on 2 August in 2013, and the others being made in 1999 on 1 and 22 August, and apparently 5 September! In a similar vein, a late Four-spotted Chaser was reportedly seen on Whixall Moss on 25 October, though this was unconfirmed.

Some of the later summer species also emerged early with **Black Darter** being recorded on 15 June at Whixall Moss. The earliest ever sighting for this species was 9 June in 1999, again on Whixall Moss.

At the other end of the flight season mild weather allowed for the possibility of records to be broken; however it was not to be as Common Hawker and Black Darter were last recorded on 25 October 2022, a good few weeks short of the November records made in 2021. Only Common Darter was recorded in November by myself near Earls Hill, Pontesbury on 14 November. This was 11 days earlier than the 2021 record made by Stephen Barlow at Whixall Moss.

In total 27 species were recorded comprising 16 dragonfly and 11 damselfly species. Most notably **Downy Emerald** was recorded at a new location Mousecroft Pool, just south of Shrewsbury. Identified by a mark on the wing, this same male was recorded two days in a row on 27 and 28 May. **Small Red-eyed Damselfly** continues to spread in Shropshire being recorded at two new sites; Telford Town park and Pasford Farm south east of Telford on the Shropshire Staffordshire border. Despite the ongoing range expansion of **Willow Emerald Damselfly** we still, as yet, have no Shropshire records.

The Shropshire Dragonflies flight season blog again benefitted from many of your fabulous photographs illustrating the activities on the wing during 2022. Contributions to the blog are all very welcome and activity picks up from

mid-April onwards so visit the Shropshire Dragonflies Website (http://shropshiredragonflies.co.uk) and take a look. Hopefully, by then you will also find a much more detailed account of the 2022 flight season in the Shropshire Dragonflies Newsletter.

Grateful thanks to all of you who sent in records & photographs during 2022 and I look forward to hearing all about your sightings in the glorious summer days of 2023!

VC54 North Lincolnshire by Fiona McKenna

Having taken on the CDR role for North Linconshire halfway through the year I have been busy getting to grips with how the role (and iRecord) works, and ploughing through a backlog of records. It has been interesting looking at which sites are well recorded; unsurprisingly, most of the Lincolnshire Wildlife Trust (LWT) sites in this patch are well represented! It was good to see records from other less well visited sites too though, such as cemeteries and urban parks - you never know where dragonflies may turn up. Below is a brief summary of the 2022 season:

The season seemed to start as expected with Large Red Damselfly records trickling in towards the end of April. The first records, both on the 20 April, were from Richard Davison at LWT Fiskerton Fen near Lincoln and John Petyt at Burkinshaw's Covert, near Immingham.

The first Four-spotted Chaser record for our area was from Steve Routledge, seen on 23 April at LWT Messingham Sand Quarry.

On 5 May an anonymous recorded spotted a **Broad-bodied Chaser** at Hutoft Pits over on the coast. LWT Far Ings brought the first **Blue-tailed Damselfly** record for our area on 6th May, thanks to Adam Parker.

Hairy Dragonfly was recorded at Chambers Farm Woods on 17 May by Erich Hediger. Azure Damselflies had made an appearance on 22 May at Trent Port, as recorded by Brian Hedley.

I was lucky enough to spot a newly emerged **Emperor Dragonfly** at LWT Kirkby Moor on 26 May whilst on a site visit for work. Only a week later Su Coleman recorded Emperors at Ashing Lane Nature Reserve near Dunholme too. June was a busy month for records with all the expected species making an appearance including, one of my favourites, the **Southern Hawker**, which was first recorded on 11 June at Kirkby Gravel Pits by Les Binns. Les also captured a cracking photo of this stunner too.

It seemed to be a quiet year for migrant species compared to previous years. There was just one record of **Southern Migrant Hawker** being seen at LWT Gibraltar Point by Nige Lound on 7 August.

Willow Emerald Damselflies have been reported in good numbers and across most of North Lincs in 2022. The earliest record came in from Mr D J Miller at Swinn Wood, near Alford on 29 June. The latest record that I've seen so far was from Far Ings on 11 November seen by Darren Wozencroft.

I'd like to say a huge thank you to everyone who has sent records in and I've really enjoyed seeing lots of your beautiful photos too. In 2023 I look forward to getting to know my patch better, enjoying more of your photos, organising a few field meetings for the summer and meeting lots of dragonfly fans! Oh, and hopefully getting to grips with iRecord a bit more. Wishing you all many sunny days filled with dragonflies!

VC55 Leicestershire with Rutland by Ian Merrill

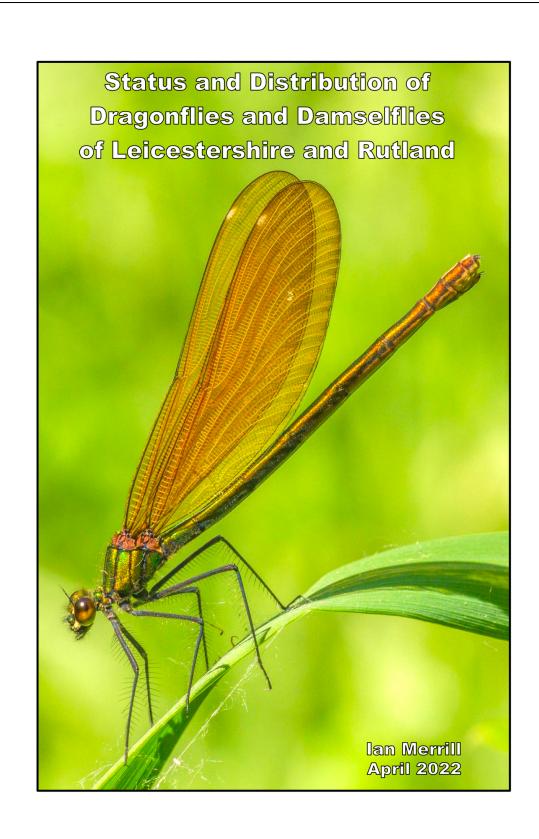
Regular readers of this annual summary may recall the phenomenal westward expansion of the Willow Emerald Damselfly in VC 55, which was reported in the 2021 edition, and that a thorough update of our recording area's distribution atlas was due in light of these discoveries. An early landmark was therefore the publication of the Status and Distribution of Dragonflies and Damselflies in Leicestershire and Rutland in April 2022, in advance of the flight season. This is the third iteration of this document since the first was published in 2015; however this edition has received a major overhaul with much-appreciated editorial input from Steve Cham and Adrian Parr. A copy can be downloaded from the NatureSpot website by following the link above.

Scarce Chaser made an appearance on the upper reaches of the River Soar, from June, where this recent colonist is yet to break free of a two-year life cycle of adult emergence. An exciting find at this site were the first Scarce Chaser exuviae for VC 55; although this species has clearly been breeding in VC 55 for some time, this is the first material evidence. Still only confirmed to be present at the widely-separated sites of the upper Soar and Welland Rivers, it is hoped that new sites for Scarce Chaser will be found in-between these localities and the search will continue in 2023.

The Beautiful Demoiselle continued to inch its way northwards in 2022, with a handful of new sightings to the south of Leicester City. The lowland clays which dominate the current limits of this species' VC 55 range remain suboptimal and the Beautiful Demoiselle continues to struggle to gain a firm foothold in our recording area. If it can find its way to the much more inviting habitats of the Charnwood Forest in the coming years, hopefully this status may change.

The dramatic expansion of the Willow Emerald Damselfly in VC 55 was well-covered in the 2021 annual summary, meaning that the main news in 2022 was the predictable infilling of previously unrecorded sites. The spread to the southwest of our recording area does represent a real change in distribution detected for the first time in 2022, where evidence of its presence was found along the entire length of the Ashby Canal. Winter searches for oviposition scars remain the most effective method of recording the presence of this fascinating newcomer to VC 55, and recorders are encouraged to try their hand at this cold-weather dragonfly recording strategy.

I will conclude with my traditional note of thanks to all who have contributed records in 2022, and with a plug for the <u>Leicestershire and Rutland Dragonfly Facebook Group</u>, which has continued to grow in terms of support and popularity. In 2023 I plan to continue the search for new colonies of both **Scarce Chaser** and **Beautiful Demoiselle** and hope that others will join me in the quest to map the constantly changing distributions of our counties' Odonata.



Status and Distribution of the Dragonflies and Damselflies of Leicestershire and Rutland



Scarce Chaser exuvia, River Soar, June 2022



Willow Emerald Damselfly oviposition scars on Ash, Ashby Canal, November 2022

VC56 Nottinghamshire by Chris Bradbury

2022 was an average year for Nottinghamshire with 21 Odonata species recorded, and all of them probably breeding; that is two less species and one less breeder than 2021. Those two species were Black Darter (one recorded in 2021) and Common Hawker (ovipositing female recorded in 2021); both had been observed on the same Kirkby-in-Ashfield site. Sadly, the pools had dried out by summer of 2022; I wonder if it is possible that the Common Hawker larvae could survive the desiccation? It will be a long wait to find out, as they spend perhaps 4 years in their aquatic stage before emerging as adults.

Just under 1200 records were received, and still continue to come through on the preferred iRecord site and also from iNaturalist. The first reported sighting of the year was a Large Red Damselfly on 4 April at Seller's Wood, Nottingham; the latest report was an adult Common Darter on 25 November at Linghurst Lakes, coincidentally the same last date as Derbyshire.

Variable Damselfly, Coenagrion pulchellum, had a good season at Skylarks Nature Reserve, at Holme Pierrepon, and it was also recorded twice at Netherfield and once at Colwick Country Park. Late May to the end of August is the time to look for this species. It would be easy to think they are established at this new location of Trent gravel pits now, but one never knows with them in Nottinghamshire. There have been no recent records from north Notts or the Grantham Canal in the east of the county where they were formerly known.

Scarce Chaser, Libellula fulva, was once again seen on the River Soar, north of Kegworth Marina, as it has been on even-numbered years since 2016. I suppose that there will be an event that causes it to become annual, and that could be the hot summer of '22 if some of the larva are advanced by the exceptional conditions. Perhaps it is worth a visit to the site to check, if you're feeling lucky. Late May to the end of July will be the best time to look for them. It would be good to see this species make another surge northward and that may also have happened in 2022, using the additional solar power provided.

I gave a talk recently to a Papplewick nature group, Friends of Moor Pond Woods; it's not something that I normally do, but it was fun. I showed 70 photos and talked without a script for about 90 minutes, covering identification, breeding biology and anything that fitted the flow, along with some audience participation. I may do more next winter.

Many thanks to the nature groups and individual contributors who made this report possible.



Photo By Roy Frost

VC57 Derbyshire by Chris Bradbury

2022 was a decent year for Odonata in Derbyshire with 23 species recorded, and 22 of them certainly breeding, as reported in 2021. Just over 1000 records were received, and still continue to come through on the iRecord, the preferred site, and also from iNaturalist. The first reported sighting of the year was a Large Red Damselfly on 18 April at Forbes Hole, Long Eaton. The latest report was an adult Common Darter on 25 November at Pleasley Pit.

Willow Emerald Damselfly, Chalcolestes viridis, was new to the county in 2021 and continued to colonise new areas in 2022, crossing the Pennines to reach as far as Cheshire. I think it will be our commonest Damselfly before too long. It's here to stay!

Small Red-eyed Damselfly, *Erythromma viridulum*, was first seen in the county in 2008 and has also become so well established as to outnumber its larger cousin in most suitable wetlands.

Hairy Dragonfly, Brachytron pretense, was recorded on 5 occasions in 2022 from Markham Vale and Forbes Hole in Long Eaton. There are probably more sites but it continues to have a tentative foothold in Derbyshire after promising to colonise more widely.

Golden-ringed Dragonfly, Cordulegaster boltonii, is probably under-recorded with just 9 reports received for 2022. Most were from the Eastern moors, especially Bar Brook moor, and an exuvia was found from Umberly Brook. In addition, there was an outlying photographic record of a male from Lightwood reservoir near Buxton.

Keeled Skimmer, Orthetrum coerulescens, a male was photographed near Little Barbrook reservoir on 21 August. Publication of this on social media brought in a further record for 2021, just over the road at Ramsley reservoir. This brings the Derbyshire records of Keeled Skimmer up to five since the first one in 2006, with four of them seen at Bar Brook and Ramsley. This is the only one of the 23 species recorded in 2022 that isn't known to be breeding in the county. I strongly suspect there could be a discreet population, somewhere on the eastern moors in an area that is less visited. It has now been seen in the county in four of the last five years! I will try to organize a search for them this year. It is certainly one to watch out for if you are on the moors this summer from June to August.

Many thanks to the nature groups and individual contributors who made this report possible.

VC58 Cheshire & Wirral John Roberts

2022 was a good year in respect of logged sightings (2042) which were well above the five year average (1862). The first recorded sighting of a Large Red Damselfly was on 19 April which is comparable with the previous five years. However, the extended warm weather in the autumn resulted in very late sightings of Common Darter on 28 November, five days later than the previous record for VC58.

While every effort has been made to encourage local recorders to submit sightings and images via iRecord or customised spreadsheet, there remains a number of recorders who seem happier sending their records via email. With this in mind, I decided to trial the use of WhatsApp to replace email in 2022. There is no disadvantage to me in the use of WhatsApp and it does offer advantages to the recorder by being more convenient when submitting a sighting and it quickly alerts others in the group to the best locations and the presence of 'rarities'. A WhatsApp group for Cheshire Dragons was established and many email users voluntarily converted to the new platform. The result was a surge in overall records submitted; there were 169 email records in 2021 and 514 combined email and WhatsApp records in 2022. Of course, there are privacy issues to face when using WhatsApp and the 15 current users were made fully aware of them. I will continue with the WhatsApp group in 2023 and see if I can convert more of the emailers to the new system.

The outstanding events in 2022 was the sightings of Willow Emerald (*C. viridis*) at the evocatively named Maw Green Tip pool, the first of which was made on 14 August when a male was photographed. Shortly after this, a second male was sighted and confirmed as a separate individual by comparing wing venations. The sightings were on young willow growing around the pool edge and it was speculated that the warm weather and the southeast breezes had hastened their arrival in Cheshire. On 5 September a female was sighted and photographed with the hope that breeding might occur. However, no breeding pairs were seen and no distinctive scarring (from egg laying in tree bark) was discovered when the willows were carefully inspected in December.



Male Willow Emerald Damselfly at Maw Green Tip pool on 14 August 2022- Photo copyright A. Goodwin

VC59 & VC60 Lancashire By Steve White

This report covers vice-counties 59 (South Lancashire) and 60 (West Lancashire) but politically the county has been so dismembered that applying the title 'Lancashire' to this area now means very little to anyone apart from a handful of biological recorders and cricket fans. It includes the areas north of the River Mersey in Greater Manchester and Merseyside, most of the present county of Lancashire as well as smaller areas of Cheshire and Warrington.

The year's stand-out events were first records for two species. One of these, Willow Emerald, had been predicted due to its recent expansion nationally. Two males were found at Lower Towneley Pool in Burnley on 5 September and were joined by a female on the 14th, although there was no evidence of breeding.



Willow Emerald, Lower Towneley Pool, Burnley, 14 September by John Wright

The second newcomer had not been even dreamed about: a female **Norfolk Hawker** on 19 June at Amberswood Common, Wigan, part of the recently-designated 'Flashes of Wigan and Leigh' National Nature Reserve; another was reported on 9 July. Unlike the Willow Emerald record it's not clear whether this represented a massive expansion of the species' British range or if it was a continental migrant.



Norfolk Hawker, Amberswood Common, Wigan, 19 June by David Tyler.

Our most recent colonist, the **Small Red-eyed Damselfly**, continued to thrive in 2022. The two disjointed sites where it was first, seen in Burnley and Liverpool, both reported evidence breeding again, but it was only in Merseyside, where it was reported from three new sites, that showed any sign of spread.

Although there was only one record breaking early emergence this year, a **Black Darter** on 14 June, seven other species were reported on earlier dates than average, and no species appeared later than average. For the 16 species for which we have sufficient records since 1987 ten have exhibited a statistically significant trend of early emergence.

The pattern at the other end of the season is not as clear cut. Although nine of the same species have typically remained in flight later over the same period, only five were recorded later than average in 2022, including our latest ever **Broad-bodied Chaser** and **Common Darter**, recorded a month later than usual; on the other hand five species had final records earlier than average. But it remains clear that the dragonfly-watching season continues gradually to increase – one of the very few benefits of climate change.

VC61 South-east Yorkshire by Martin Roberts

Approximately 1300 records were received this year but a large proportion came from Birdtrack with 10km or even 100km grid references. As all those records related to common species for VC61 they have been held as 'pending' awaiting possible refinement of the grid references. Consequently, only 403 records were accepted for the VC this year. The first record was of a Blue-tailed Damselfly on 22 April.

2022 was a most unusual year with record high temperatures across the UK. The warm weather continued into the Autumn but even so the date of the last record was the same as that for 2021 (a Common Darter on 20 November). Several of our regular recorders had had hopes of getting a first December record for the VC, but that was not to be.

Highlights for the year were few, but included a single **Southern Migrant Hawker** at Spurn on 20 August and a single male **Yellow-winged Darter**, also at Spurn, on 5 September. Spurn is usually the most reliable location for **Red-veined Darter** in Yorkshire but none were reported in 2022.

At least one **Lesser Emperor** was seen at a holiday camp lake just south of Filey over a period of several days in the last week of June.

Willow Emerald Damselfly continued to spread across the VC with 41 records accepted this year. Since the species was first recorded in the VC in September 2019, a total of 77 records of adults from 29 sites have now been received and it is now considered fully resident.

Many thanks to all those who sent in records this year.

VC62 & VC65 North East & North West Yorkshire by Keith Gittens

The start of the 2022 dragonfly season was one of mixed fortunes with some species, such as Four-spotted Chaser and the Azure Damselfly, occurring in lower than usual numbers, which I can only assume was down to poor weather around the time of emergence. Numbers of these species did not improve even when the weather picked up.

The hot weather from June onwards gave plenty of opportunity for dispersal and **Banded Demoiselles** were regularly found in low numbers at still water sites. **Emperors** were even recorded over bog pools at Fleet Moss on top of the Pennines.

Hairy Dragonfly is now being recorded in VC62 on a yearly basis although gaining proof of regular breeding is proving difficult; in 2022 there was a first record for VC65 from Nosterfield Nature reserve.

One of the highlights of the year was an influx of Lesser Emperors to sites in the Scarborough area of VC62 in June. There was also a single record of a female from Nosterfield NR in VC65 in August.

Willow Emerald Damselflies continues to establish across the region with the species now being recorded from VC65 as well as 62; the earliest sighting was on July 31.

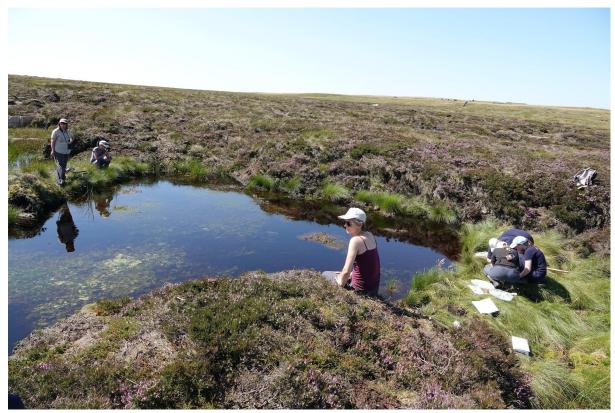
At Nosterfield Quarry, where rare wetland plant communities are being established, regular monitoring for Odonata, with the help of reserve volunteers, recorded a total of 16 species.

The Yorkshire Peat Partnership (YPP), a collaboration of various conservation bodies, is active on the Pennines and the North Yorkshire Moors with the aim of restoring upland peat bogs to help reduce flooding and erosion. The opportunity to have a day with some of the YPP staff on Fleet Moss to look for dragonflies, and help with their identification and recording skills, was not one to be missed. Incredibly, the day was perfect with 30°C on top of the Pennines and although many pools were dry, the deeper ones still held water and a total of eight dragonfly species were present; pond dipping also produced a number of larvae. The restoration of such habitat is a plus for Common Hawker, Black Darter and Common Emerald Damselfly which is showing signs of decline, according to the 2021 State of Dragonflies report.

Forest of Flowers, north of York, is a private farmland restoration project with some 75 acres being planted as woodland and sown with native wildflowers. Interspersed are some 17 wildlife ponds and dragonflies are starting to flourish. Notable in 2022 were good numbers of **Broad-bodied Chaser**.

Scrub control continues at Yorkshire Water's Boltby reservoir to maintain habitat for both dragonflies and butterflies. Surprisingly, Willow Emerald Damselfly has already managed to find its way to this upland site, and egg-laying scars were found in late 2022.

It was great to be able to once again attended a number of walks and events in conjunction with the Yorkshire Dragonfly Group. Events included a wildlife day at the Woodmeadow Trust meadows at Escrick, and a Yorkshire Naturalists Union field meeting at Strensall Common.



Fleet Moss YPP August 2022 by Keith Gittens.

VC63 South-West Yorkshire Alistair McLean

Some local recorders have reported that they found 2022 a poor year for dragonflies. Poor or not, the records show that the county experienced an unusually long season, with early risers such as the Large Red Damselfly (*Pyrrhosoma nymphula*) emerging at the earliest date known for several sites across the county. The season was also stretched at the end of the year, with Common Darters (*Sympetrum striolatum*) reported to be egg laying well into November. The unprecedented hot weather in July, which was particularly extreme from Lincolnshire across to South-West Yorkshire, may have had a negative effect on some of the traditionally northern species. But it may also have benefitted other species, such as the Southern Hawker (*Aeshna cyanea*), which appears to have had a very good year.

In 2021, the first Willow Emerald Damselfly (Chalcolestes viridis) records were reported for South-West Yorkshire. In 2022, the number of sightings has increased dramatically, and the species is confirmed throughout Sheffield, East of the Peak District National Park, and at a wide range of sites further north, east of Wakefield. The wide dispersal of the records suggests that it could be found at many more sites yet. This year we have certainly received far more sightings of Willow Emerald Damselfly than Common Emerald Damselfly (Lestes sponsa), which may be a result of recorder effort, misidentifications in previous years or further evidence that the Emerald isn't doing so well.

VC64 Mid-West Yorkshire by Simon Joseph

This year brought considerable excitement and extensive searches for Willow Emerald Damselfly at the eastern end of the vice county. The first recorded for this species in the vice county consisted of a single ovipositing female at Staveley NR in October 2021. 2022 was dramatically different with reports starting to come in by late August; 46 records were received for Willow Emerald Damselfly for 2022 in total.

A single male was seen at Staveley, close to the 2021 location, on 27 August and 2-5 adults were recorded on 17 September.

There were 33 reports from St Aidans on 13 separate dates in September and October. All of these were singletons or two adults from the same area, between the Oxbow Lake and Lowther Lake, and a lone female was seen ovipositing at this location. Low numbers and repeated reports on the same day suggest groups of people (excitedly) photographing the same individual. Extensive searches at Rodley Nature Reserve turned up a singleton on 18 September; others were seen very nearby in the neighbouring VC63. A single male was seen once at Fairburn Ings 2nd September and a single male 21st September Bishop Wood near Wistow. There was a single male seen near Selby dam. Up to five were seen just north of Selby by a pond at Bishop Wood. There were also three sightings along the Selby canal at three different locations on three separate dates, with up to five individuals at one spot, including a pair copulating, and more than six at another spot. All of this was exciting and suggested gradual spread from existing sites. However, the last spot on the Selby Canal had over 100 individuals seen in one survey and evidence of oviposition scars on 13 trees, strongly suggesting a well-established, previously undocumented population. (Chris Abbot's survey, with thanks).

Overall the number of species seen in the VC was similar to previous years. 11 species remain common and widespread throughout the VC: Azure Damselfly; Blue-tailed Damselfly; Broad-bodied Chaser; Common Blue Damselfly; Common Darter; Emerald Damselfly; Emperor; Four-spotted Chaser; Large Red Damselfly; Migrant Hawker and Southern Hawker

Seven other species have healthy, stable populations, but are have restricted ranges.

Banded Demoiselle are found along the rivers Aire, Ouse, Ribble, Ure, Wharfe, and wetlands close to them.

Black Darter, where the habitat is suitable, are found on Ilkley Moor, Forest of Bowland, Grindleton Fell, Ingleborough NNR, Timble Ings and Malham Tarn.

Black-tailed Skimmer are found reliably at Fairburn Ings, St Aidans, Ledston, Hay-a-Park Gravel Pits

Brown Hawker are common and widespread west of Ilkley, occasionally seen at Grindleton Fell and the River Ribble near Clitheroe, not recorded in between. Golden-ringed Dragonfly are reliably found at Timble Ings, Forest of Bowland (especially Cross of Greet Bridge), Ilkley Moor and occasional sightings in other places.

Red-eyed Damselfly are found at the Eastern end of the VC at a handful of sites – StAidans, Fairburn Ings, Ripon Wetlands, Staveley, Sherbern-in-Elmet and ponds near the River Ouse around Wistow.

Ruddy Darter are common eastward, particularly St Aidans, Fairburn Ings, Sherburn-in-Elmet, Staveley NR and occasionally around Leeds.

The following four species are less common:

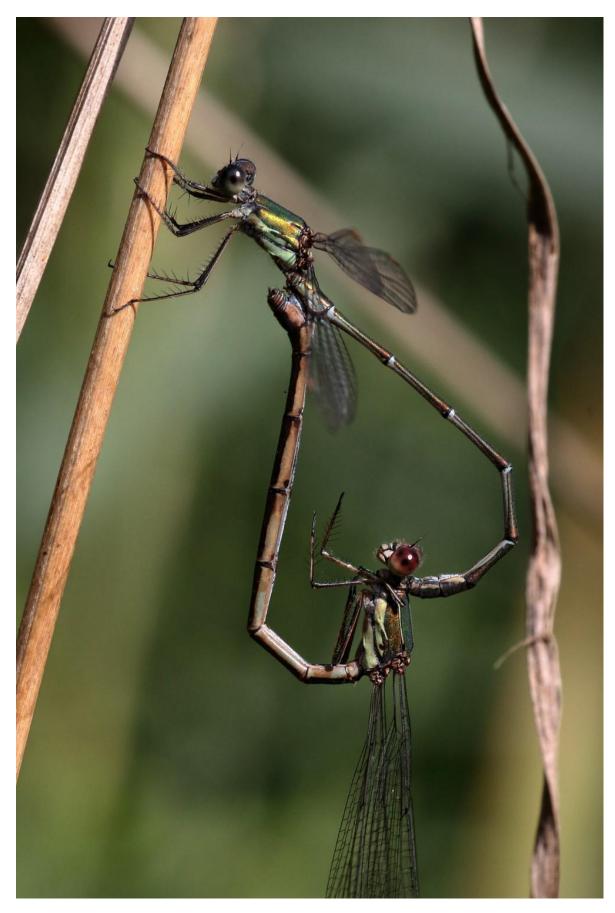
Small Red-eyed Damselfly has a small but stable populations at Rodley NR, St Aidans, Staveley, Sherburn-in-Elmet and Wistow Clough.

Hairy Dragonfly has a single well established population at Staveley NR, but none elsewhere.

Red-veined Darter has small numbers at St Aidans in 2017 and 2020, Staveley in 2015 and 2020, none were seen this year.

Southern Migrant Hawker and **Vagrant Emperor** are rare migrants with couple of sightings of singletons; none were seen in 2022.

Although the range of species is largely unchanged there are some indications of the effects of rising temperatures. Martin Roberts from the Yorkshire Dragonfly Group has been surveying the Harewood Within landfill site as the ponds there mature. The 2021 surveys counted 4367 individuals of 13 odonata species, compared to 1681 individuals and 10 species in 2022. The number of Common Blue Damselflies at that site were down from 2706 in 2021 to 600 in 2022, for example.



Willow Emerald, pair in cop Selby Canal, Chris Abbott

VC66 Durham by Michael Coates

The British Dragonfly Society (BDS) works in conjunction with the Durham Wildlife Trust (DWT) to actively survey the region between the River Tees and the Tyne. This approach allows us to pay particular attention to a wide range of known sites, plus pick up any other recorded sightings within the region.

The first excellent news is that there continues to be considerably more sightings recorded. A "sighting" could be any number of a particular species, with the range in 2022, being from 1-300 spotted at each sighting. There were 3932 sightings in 2022, compared to 2315 in 2021 and 1257 during 2020 (lockdown year). Having said that, 1200 came from one observer, and primarily at one site, so we still need to increase the number of regular contributors.

In recent years it has been apparent that there are 19 resident species in VC66, plus the occasional visitor that gets the local Odonata spotters excited; this brings the total of observed species up to 21. 2022, turned out to be a particularly interesting year, with a single confirmed sighting at RSPB Salthome, of a Southern Migrant Hawker, which caused a paparazzi-like swarm of photographers for a few days; however, none of them managed to see the individual Hawker, who became the record holder for the most northerly sighting ever. Then at Twizell Woods, a single photo of a strange looking Skimmer was identified as a Keeled Skimmer, a first since I have been Recorder. As Twizell is such an excellent breeding site for Odonata, we will be paying particular attention here in 2023.

Another high point was the large number of breeding **Small Red-eyed Damselflies** at Brasside Pond, located just outside Durham, making it the most northerly confirmed breeding site in the UK. One individual was also spotted further north at Washington Wildlife and Wetlands Trust so, again, we will be monitoring those locations carefully in 2023.

Lastly, in terms of exciting sightings, over 300 **Migrant Hawkers** were spotted on 13 September at Oakenshaw Nature Reserve, most of which were coupling or laying eggs, so September 2023 we expect a similar show.

In 2022, a small group of DWT spotters were also fortunate to be allowed (after some health and safety training) to survey three Northumbrian Water sites that are not accessible to the public. 24 visits were made throughout the season and nine species were spotted; however, we were thwarted by the weather on many occasions, and nothing was seen. We had expected there to be far more Odonata, and recommendations will be made on how to make the sites even more attractive to different species.

The season started on 20 April, with the first Large Red Damselfly being seen at Twizell Woods, making it the first site in the north to have a sighting. Possibly due to the wet winter, or simply more observers, there were 275 sightings of Large Red Damselfly, compared to 183 in 2021. While the wet winter might have helped them, the incredibly dry summer did not, and they were last seen on 4 August 4. The summer was one of the driest on record and most small ponds were dry until the end of the season, plus some of the larger ones, such as

Shibdon, which was very upsetting as this will probably impact the number of early species next year.

The second species to appear was an **Azure Damselfly** on 3 May, and a **Blue-tailed Damselfly** on 4 May. In total, nine species emerged during May, up from six in 2021, so again it would appear that the weather was favourable in the spring.

Normally in VC66 we only see Damselflies until well into June, apart from the occasional individual Dragonfly, but in 2022, both Four-spotted Chaser and Broad-bodied Chaser were being seen from 8 May, with the first Southern Hawker on 18 May, and a Golden-ringed Dragonfly on the 24th, so all very early. As mentioned, the excitement soon wore off though when many of the sites, at which they were laying eggs, dried up during the summer.

Once again, we missed out on **Beautiful Demoiselles** who are often recorded tantalisingly close to our borders but don't stray across the River Tees or Tyne. Luckily though, the River Wear provides ideal habitat for the **Banded Demoiselle**, and they were spotted on 93 occasions at a variety of locations, between 15 May and 17 August, which is four weeks more than the year before.

Golden-ringed Dragonflies continue to evade most spotters, with just eight people recording them; however, one recorder knows where they are and recorded them on 71 (out of 79) occasions. Therefore, if you want to see the Golden-ringed Dragonfly, you should go to DWT Black Plantation in June, Langley Park Wetlands or Oakenshaw NR during June and July.

There was one unconfirmed sighting of a Willow Emerald Damselfly at Joe's Pond (Rainton Meadows). The spotter is from the south and knows them well, but as there was no photographic evidence and an exhaustive search by other recorders could not confirm it, so we will put it as a "maybe". A study of the overhanging branches at Joe's Pond did not recorded any of the tell-tale scarring that is caused by Willow Emerald Damselflies when they lay their eggs.

The most common species in VC 66 was the Common Darter, observed on 494 occasions, closely followed (441) by the Blue-tailed Damselfly. Southern Hawkers, often thought to be the most common in the UK, came in third with 379 sightings, followed by the Azure Damselfly with 341. Interestingly, the quintessential Damselfly, the Common Blue Damselfly, was 7th. One "bad" year doesn't make for a trend, and it could be that spotters are getting better at differentiating Azures from Common, however, we will monitor this species.

Emperor Dragonflies continued to become far more common than they used to be, and their bold territorial patrolling right next to humans makes them a delight to see. Four years ago, they were hardly observed in this region, but in 2022 they were observed on 194 occasions, at 29 locations.

Autumn brought the **Migrant Hawkers** as usual, and while they were spotted 227 times, most of those were at Oakenshaw NR where the large ponds just managed to keep at least some water. As they tend to emerge around the time that the region's small ponds dried out, it appears that their numbers were impacted at such sites. Hopefully, after a mass emergence at Oakenshaw NR, many of them will have spread out and laid eggs.

Another species that seems to be on the rise, is the **Black-tailed Skimmer**. Hardly seen four or five years ago, they were spotted at nine sites and they appear to be spreading.

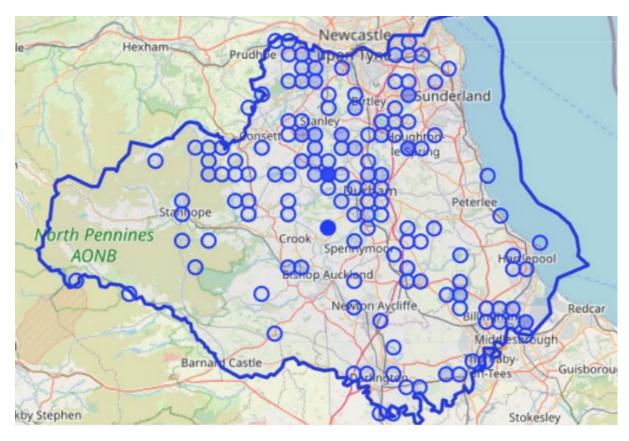
Black Darter sightings were down, however, that is mainly due to one recorder not visiting the main stronghold, Greencroft NR in Anfield Plain, as often as other years. They like boggy areas and so they are generally in locations that recorder find difficult to get to, so it is likely that they are more common than our survey indicates.

The season ended a couple of weeks after most of us had packed away our binoculars and field guides, when a hardy **Common Darter** was photographed at Rainton Meadows on 26th November. This is two weeks later than ever seen in recent years.

The sightings in VC 66 continue to primarily come from the central region, although there were more from near the coast this year. Recorders are encouraged to look in the areas that do not have circles on this summary map.

Sites to visit in 2023, if you want to spot a wide variety of species are: Rainton Meadows, Low Barns, Twizell Woods, Oakenshaw NR, RSPB Salthome, Wildfowl and Wetlands Trust (Washington) and Daisy Hill LNR. Ward Jackson Park near Hartlepool has also been mentioned by a few keen recorders, and it was one of the locations at which **Small Red-eyed Damselflies** were observed. To see the best sites in VC66, use this link to view a Google Map that includes directions, parking information and a little detail on what you might see. https://www.google.com/maps/d/u/0/viewer?ll=54.80573060670217%2C-1.611413500000043 &z=9&mid=1GLhdlwKe0jHxceLUxgLZFnkk_OD8Xi7E

In 2022, three BDS/DWT guided walks were run and it is hoped, now that restrictions have eased, that far more will go ahead in 2023. These will be on the Durham Wildlife Trusts Events page and will be circulated by the BDS. My thanks as always to those who submit sightings. https://www.durhamwt.com/events



Durham summary map.



VC69 & VC70 Cumbria by David Clarke

The early part of the emergence season had predominantly cool, dry and often windy conditions, with limited sunshine, resulting in few records before June. Limited rainfall and sunshine were a feature of much of the rest of the season, with a very hot spell in mid-July and another short one in August, which led to the drying out of many shallow pools and flushes.

There were no records of migrant species but **Migrant Hawker** records in mid-September in the Carlisle/inner Solway area were unusual and coincided with records on the east side of the country. Numbers at one site were well into double figures. The date was clearly too late to derive from local breeding (for which there is scant evidence anyway), leading to the obvious conclusion that this was more likely to be a migratory movement.

Despite early weather trends, 8 May brought extremely early records of two species: Beautiful Demoiselle and Downy Emerald. The former was at Yew Tree Tarn, Coniston (NY30), a well-known site, but the latter was especially interesting because it was at the most northerly recent location in the county. This was at Isthmus Bay on Derwentwater, in tetrad NY22L, new for this species. The individual photographed was very freshly emerged. Searches on adjacent shores of the lake in late May - early June have not revealed the species' presence, though weather was poor and the most promising habitat not easily accessible.

As reported in Dragonfly News 76, **Banded Demoiselles** (a male and a female) were first found at the Skelwith Bridge, a **Beautiful Demoiselle** site, on the river Brathay (NY30) in the central Lake District. This year, **Banded Demoiselle** were present there in greater numbers and found in close association with their sister species, so it now appears there is a breeding population. This is one of three locations in the county where the two species may be found together. Other records again suggest the species is expanding its range.

A follow-up survey after a **Beautiful Demoiselle** sighting was reported on iRecord for the River Greta, near Brundholme (NY22), east of Keswick, on 20 June revealed its presence there in small numbers; a previously unrecorded site/tetrad. It is possible that exploration of other streams in this general area will reveal more breeding sites of the species. Whether this amounts to the start of the a more large scale expansion, like that exhibited by its sister species, remains to be seen.

The single known site for **Variable Damselfly** in West Cumbria (NY00) was checked by myself on 14 June, my first visit since 2016. The species was confirmed present and still the most abundant Coenagrion species at the site; Natural England was advised about the site's condition and species status. The other single-site species, **Ruddy Darter**, still hangs on at its wetland near Wigton (NY25). Its northerly location in the county (where most of its previous sites were located) is somewhat anomalous and could perhaps point to a north-easterly arrival of the species back in the 1990s.

The Brown Hawkers sighted at Foulshaw Moss (SD48) on 21 June were at early limit of the species' flight period. The species was later found in small numbers well inland in the Lake District at High Arnside Tarn (NY30). This mirrors records from that general area in previous years and suggests the species may be extending from its hitherto very limited haunts on the southern coastal fringes of the county. Broad-bodied Chasers, which had been widely recorded in 2020 and 2021, were seen at least as frequently in 2022, with a spread of records in at least 23 tetrads across the whole area, except in the real uplands. By contrast, Black-tailed Skimmer continues to have a limited presence in the extreme south and southwest of the county; breeding was confirmed at Sandscale NNR (SD17); up to five were counted at Fell End NR, Hale (SD47). The new area for Keeled Skimmer mentioned in 2021, was visited in 2022 without further finds (SD79B – Garsdale: Breaskay Moss). It is still likely that the species is under-recorded in that general area which is actually in VC 65 and Cumbria!

White-faced Darter emergence at the Drumburgh Moss introduction site on the Solway had already begun by the time of the first monitoring visit on 19 May; the site was monitored weekly from then on. 124 exuviae had been found by 30 June, many more than in the previous season, and mating was seen on 2 occasions, though there were no records of oviposition. It was especially good to find that 1st-year larvae were present. The weather in May was generally poor; June was mixed and often dull. Counts of exuviae at the donor site yielded a total of over 2700: this much exceeded the 12-year average from site monitoring and gives confidence that use of the site for introduction projects has not harmed the population.

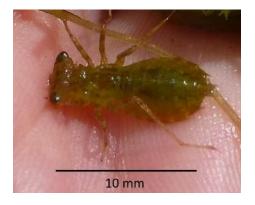
Almost 1300 records for the year had been received by mid-December 2022. Some 63% of records derived from iRecord/iNaturalist sources, the remainder from local recorders. Anonymous records and those with grid references to only 10km resolution (or both) were not accepted.

Small Red-eyed Damselfly is currently mapped for two south Cumbria squares on NBN (SD26 and SD48). These are records from previous years that were impossible to verify for lack of evidence and/or improbable dates or locations. The species has yet to be confirmed for Cumbria; the BDS Records Officer is aware of this situation.

An article has been written on request for Cumbria Wildlife Trust for its series of e-articles (to be circulated to its members in early 2023), which gives a general account of the recent state of the county's dragonflies. A copy has been provided to BDS.



Male variable damselfly by David Clarke.



White faced darter larva by David White.

VC71 Isle of Man by Pete Hadfield

Our Dragonfly season started in April in 2021 with the first record being one Large Red Damselfly on 23 April at Laxey.

The most interesting sighting of the year was a male **Banded Demoiselle** photographed on a car in a Douglas industrial estate on 3 August. This was a first for the Isle of Man but as the location is close to two garden centres, and nowhere near any water, we can only assume it had come in with a shipment to one of those.

Surveys on the Manx Bird Life Point of Ayre reserve (MBL POA reserve) had relatively poor results but this was likely due to unfavourable conditions reducing the amount of possible surveys. **Emperor** numbers were down with only a maximum of three being seen. Our latest coloniser, the **Brown Hawker** (which only occurs at the MBL POA Reserve), was only seen once with one recorded on 11 August. **Migrant Hawker** numbers on the site were down from 2021 with only a maximum of five on 28 September.

Migrant Hawker numbers and occupancy elsewhere on the island were up. They were recorded from 15 sites including one flying around a suburban garden in Douglas on 24 September. The first sighting of the year was at the Calf of Man on 10 July; this is our earliest record by 24 days. The record count for the island was taken on the 10 September with an excellent 21 at Ballanette.

We found 2 new sites for **Black Darter** at Kionslieu and Conrhenny, plus 3 new sites for **Emperor** at Kilabrega, Scard and Ballaugh Curraghs.

There were four excellent counts of Damselflies for the island: 105 Blue-tailed Damselflies at the Calf of Man on 22 June, approximately 80 Large Red Damselflies at the Curraghs on 11 May, 80 Common Blue Damselflies at Tholt-y-will on 9 July, and 89 Emerald Damselflies at Stoney Mountain on 27 August.

In continuation to last year, we lost another excellent Odonata pond, this time at Ballaugh plantation due to it drying out. On the positive side a new dragonfly pond has been put in at Ballanette nature reserve and several new ponds have been dug at the MBL POA reserve; this gives the latter a good spread of different ages of ponds.

Last sighting of the year was a Migrant Hawker at the Calf of Man on the 20 October.



Migrant Hawker by Pete Hadfield.



Black Darter by Pete Hadfield.



Common Hawker by Pete Hadfield

County Dragonfly Record Contact Details

Local Group Details Can be found on the BDS website under the 'About' drop down menu.

www.british-dragonflies.org.uk