

SKIMMER 2021



YORKSHIRE DRAGONFLY GROUP

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Front Cover Photograph:

Kevin Hatley, Female Emperor Dragonfly, South Yorkshire

This magazine is produced for YDG members and includes articles by the members. Don't wait until February – if you have enjoyed the season or had a good holiday please consider sending an article.

For those who have contributed, in this difficult time, many thanks for all the amazing articles and photographs.

June Gittens

Editor

NOTES FROM THE CHAIR

Keith Gittens

When I wrote my report for the last Skimmer, we had by no means felt the impact that Covid-19 would have on all our lives. Twelve months later and hopefully we have turned the corner and can look forward to life becoming less restricted. For many, lockdown has given the opportunity to look at what is important in life, with the realisation that nature plays an important role in our wellbeing.

With restricted movement many people focused on their own gardens and local environment. This resulted in an increased interest in gardening with the construction of garden ponds and wildlife areas. Positive news for all our wildlife but in particular our dragonflies! A pond is lacking in our garden, but we hope to correct that before the end of this year. With good weather in April and May 2020, reports came in of colonisation of new ponds within days of being built, you don't have to wait long to reap the rewards of adding a pond, big or small.

Unfortunately, restrictions meant that our planned events were unable to take place but there was still opportunity for individuals to go out and record dragonflies in their local area. As a result, we now have proof of breeding of Willow Emerald in Yorkshire and confirmation of Small Red-eyed Damselfly and Hairy Dragonfly at new sites.

What will we find in 2021?

We always receive a variety of articles for Skimmer from around the globe and this issue is no exception, widening our horizons at a time when we have had to focus inward. I have to thank Dick Shillaker and Africa Gomez for initiating some of the articles and their respective authors for taking the time to write them.

The lockdown has resulted in the publishing of a book on the dragonflies of the Sheffield area, see the VC63 report for further details. Pleasing to see there are such positives from another wise difficult year.

Wishing you a healthy and less restricted 2021.

RECORDERS REPORTS FOR 2020

VC61 SOUTH-EAST YORKSHIRE

Martin Roberts

Given that the recording effort in 2020 must have been affected by the pandemic, it was gratifying that a total of 1130 records were submitted, though it must be noted that approximately 800 of those came from the city of Hull and its immediate surrounding area. The total for the VC was virtually identical to that of 2018, and only slightly below our best ever year of 2019 when 1335 records were submitted.

The high proportion of records originating from Hull was a consequence of 2020 being the second year of a coordinated survey of Odonata in and around the city by Africa Gomez and Dick Shillaker, both of whom are members of the Yorkshire Dragonfly Group. A total of 19 Odonata species were recorded in 2020, with evidence of breeding for 14 species. Their detailed report on the 2019 survey can be downloaded here: <http://www.yorkshiredragonflies.org.uk/?p=9862> (13.8 MB file)

It has been apparent for several years that Large Red Damselfly is rarely recorded in the Hull area. This year, only eight records of Large Red Damselfly were received from the whole of the VC, one of which came from Hull. This is surprising given the widespread distribution of this species in the UK.

Two notable species were both recorded at Spurn Bird Observatory; a Norfolk Hawker was caught in the Heligoland trap on 17th July and a Vagrant Emperor was seen on 17th September.

The main excitement of the year was confirmation of the arrival of Willow Emerald Damselfly in the VC.



This species was recorded for the first time last year at two sites about 15 miles apart in the south of the VC close to the Humber. A single Willow Emerald was seen at each site.



During September of this year, I received 15 reports of sightings of Willow Emerald from five different locations in the south of the VC. The Beverley and Barmston Drain, which runs through the Northern suburbs of Hull before emptying into the River Hull, was the source of seven records from various locations along a one-mile stretch, and copulation was witnessed on at least one occasion. This bodes well for further expansion across the VC.

As usual, the final sightings of the year were of Common Darter and Migrant Hawker. At 13th November, the latest date for Common Darter was typical of the latest dates for the last five years (range 9th-18th November). For Migrant Hawker, at 21st November this latest date sets a new record by five days (five-year range 24th October-16th November)

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

VC62 NORTH-EAST YORKSHIRE & VC65 NORTH-WEST YORKSHIRE

Keith Gittens

While 2020 could not be considered a normal year for recording it was still pleasing to have over 800 records submitted across the season.

The year's highlights again focus on range expansion. In late May/early June there were confirmed sightings of male Hairy Dragonflies patrolling a well vegetated redundant fishing lake at Wykeham Lakes, near Scarborough and a lone sighting of a male at Worlds End, Strensall, York.



Small Red-eyed Damselfly

As we moved into August attention turned to sightings of Small Red-eyed Damselfly, with records from a number of new sites and evidence of breeding at others. A large relatively shallow weedy pond near Catterick was the highlight with over 500 individuals recorded on one visit with many ovipositing pairs.

From September, Wykeham Lakes again came to the fore with a second year of records for Willow Emerald Damselfly and this year ovipositing females were seen. Other notable records included Red-veined Darter. This species has now been recorded on two consecutive years at gravel pits near Catterick.

There was a first record of Migrant Hawker from Foxglove Covert LNR, Catterick Garrison on the eastern edge of the Pennines.

In the North York Moors National Park, I have been monitoring some woodland pools which are part of Forest England's beaver re-introduction project. Since their arrival the beavers have opened up the pools considerably through tree felling and increased the water level by dam building. While records of Odonata for the site have been low as yet, one species has come to the fore. On one visit three male Golden-ringed Dragonflies were recorded patrolling the pools along with an ovipositing female. It will be interesting to see how the dragonfly fauna develops at this exciting project.

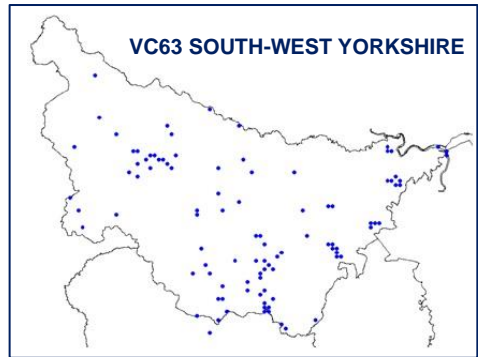
In terms of conservation work and events, these have been curtailed since March due to the ongoing pandemic. However, on a positive note, Yorkshire Water have agreed funding for further conservation work at Boltby Reservoir near Thirsk which will be managed by Freshwater Habitats Trust. When possible, conservation work at this site will be continued using a combination of volunteers from FHT, Yorkshire Dragonfly Group and Butterfly Conservation Yorkshire.

Many thanks to all those who sent in records. A special thank you to Anne Carter from the FHT for her enthusiasm and commitment to helping develop a conservation programme at Boltby.



Beaver pool

For obvious reasons, 2020 has been a difficult year for South-West Yorkshire's recorders, but the various lockdowns appear to have presented many with an opportunity to catch up with data entry and to take advantage of the advances in online recording. This year has seen over 1300 records being reported, covering all 22 commonly recorded species, some of which date back many years.



I am extremely grateful to those who took the time to review their records and pass on their data.

Another upshot of the lockdown has been the publication of the long awaited *Dragonflies of the Sheffield Area* (McLean, Richards & Whiteley, 2020), published by Sorby Natural History Society and Museums Sheffield and available through Amazon. The authors began writing the book in the mid-1990s, but other projects have prevented its completion until now. At least the pandemic has had some positive benefits!

BDS COUNTY DRAGONFLY RECORDERS

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VC64 MID-WEST YORKSHIRE

Simon Joseph

The high point of 2020 was the culmination of the campaign to prevent the building of 516 houses at Askham Bog, York supported by Sir David Attenborough. The planning application was declined following the campaign in 2019 and the Secretary of State upheld this decision in May this year.

As of December, 463 records for 22 species have been received, a similar number to this time last year. More records are expected.

The most frequently recorded species were Common Darters, Large Red Damselflies, Migrant and Brown Hawkers and Banded Demoiselles.

The least frequent were Golden-ringed Dragonflies, Red-veined darter (three records this year compare to none in 2019) and Common Hawkers. No Southern Migrant Hawkers were recorded this year (three were seen last year).

Still no Willow Emeralds despite their gradual expansion close to the VC.

Wildlife and birdwatching groups have again been a rich source of records, with their detailed knowledge of their local sites. Thanks to staff, bird watching groups and volunteers at Denso Marston, Rodley, Staveley and St. Aidans nature reserves. Planned presentations and walks at these sites were cancelled because of the pandemic, and I am hoping to hold these in the summer.

Staveley Nature Reserve is an interesting site as it is a stronghold for Small Red-eyed Damselflies, Black-tailed Skimmers and Hairy Dragonflies, which are not found in many other areas of the VC.

Members of the Yorkshire Dragonfly Group

www.facebook.com/groups/yorkshiredragonflies/ have been very helpful in recording at the eastern end of the VC, which is too far away for me to survey.

The plan for the coming year is to revive presentations and walks at key sites, strengthen links with birdwatching groups and revive plans to work with the ministry of justice to record at prisons.

DRAGONFLIES OF THE BOTANIC GARDEN OF CASTILLA-LA MANCHA (SPAIN) IN 2020

Guillermo García-Saúco Sánchez

The Botanic Garden of Castilla-La Mancha is located in Albacete, in south eastern Spain. Its seven hectares of regional and world plant collections show the wide variety of plant species that can be found in the autonomous community of Castilla-La Mancha, as well as in the rest of the Mediterranean region and the world. Half of its grounds represent the flora of regional protected habitats such as gypsum plainlands, Spanish juniper woodlands, holm oak forests, pine tree woodlands, deciduous forests, scrublands and even two ponds surrounded by native riparian flora representing a karstic and an endorheic lake. Almost 2000 plant species can be found in such recreated habitats.

One of the primary objectives of this botanic garden: the conservation of biodiversity, including the local wildlife. Recently, it received the certification of “garden of ecological excellence”, thanks to the respectful measures that are being implemented in the garden. This will probably help dragonflies and other insects to thrive in the area.

In 2020, I sampled adult dragonflies in weekly visits between May and July, and then in October, in order to study its abundance in comparison to purely natural areas. Adult dragonflies were sampled in the recreations of the endorheic and the karstic lakes, although in my visits I also included a smaller pond that is used for orchard irrigation. One big disadvantage for many dragonflies and other aquatic insects to reproduce here is the presence of invasive Common Carps in the bigger ponds. Nevertheless, a total of five damselfly species and nine dragonfly species were detected in the botanic garden.

The diversity of damselflies was not as rich as that of dragonflies, but a few interesting species are easy to find here. The Iberian Bluetail (*Ischnura graellsii*) is certainly the most common damselfly in the Botanic Garden of Castilla-La Mancha. This species is endemic to the Iberian Peninsula and it is common to find large groups congregating in reed beds and rushes. The first sampling day, I detected a rare female aurantiaca form perching on a rush. The second most common damselfly species is the Blue-eye (*Erythromma lindenii*).

In June and July, the White Featherleg (*Platycnemis latipes*) and the Small Red Damselfly (*Ceriagrion tenellum*) were spotted too, and a Migrant Spreadwing (*Lestes barbarus*) was recorded once.

In late spring, different species were recorded around the ponds. One of the most abundant species observed here is the Black-Tailed Skimmer (*Orthetrum cancellatum*). Both large ponds were regularly used by this species, and it was common to see the males patrolling the ponds.



A single Epaulet Skimmer (*Orthetrum chrysostigma*) was observed in May. This species is similar to the Black-Tailed Skimmer, although it lacks the darker patch at the base of the abdomen. Another dragonfly that was detected here is the Violet Dropwing (*Trithemis annulata*), a recent coloniser of Southern that has become a very common dragonfly. This species is a small African dragonfly that tends to perch on plants above water. In such moments, it is easy to admire its colourful abdomen, which is pruinose and pinkish.



Yorkshire Dragonfly Group

As well as the Violet

Dropwing, the Orange-winged Dropwing

(*Trithemis kirbyi*) was spotted twice.

This African species was first recorded in Spain in 2008, which makes it one of the latest

additions to the European dragonfly fauna. On both occasions, it was a male that was observed, as it perched on waterside rocks.



Orange-winged Dropwing

Other red dragonflies which became more abundant as the seasons became hotter were the Broad Scarlet (*Crocothemis erythraea*), the Red-veined Darter (*Sympetrum fonscolombii*) and, lastly, the Common Darter (*S. striolatum*) and the Desert Darter (*S. sinaiticum*), which is one of the last species to be observed as Autumn ends. So, the best time to spot this Darter in the Botanic Garden are the months of September and October

The Emperor (*Anax imperator*) was another common sight most of the warmer months. In June, I was particularly impressed by a female Emperor that was laying eggs near me, apparently unaware of my presence.



Broad Scarlet

During summer, only some Darters and the Emperor were seen as temperatures rose above 30 C. However, as autumn temperatures decreased, the Migrant Hawker (*Aeshna mixta*) was spotted a few times.

Of course, further samples will have to be taken in order to get to know the abundance and diversity of Odonata in the area. This type of garden, which opts for ecological gardening methods as it preserves plant diversity at the same time, could play a very important future role for the protection of local wildlife, including insects and particularly dragonflies.

Yorkshire Dragonfly Group On-line

Check out the website for the latest news, first sightings of the year, field trip diary, dragonfly locations to visit and how to submit your records.

To download the latest edition of Skimmer please contact Martin Roberts for password. Previous issues are also available.



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www.yorkshiredragonflies.org.uk/?feed=rss2

Africa Gómez and Richard Shillaker

In Skimmer 2020 we reported the initial findings of our project to record the distribution of damselflies and dragonflies in the city of Hull and surrounding area. As we proposed, we continued the project for a second year in the 2020 flight season. Little did we know that we'd have to carry this out through a global pandemic!

Despite the first lockdown, and certain limitations created by Covid restrictions (for example, visiting busy parks to look for dragonflies while maintaining social distancing), we are pleased to report a successful second season. We actually achieved a larger number of Odonata records for 2020 (811) than for 2019 (742). As last year, the vast majority of records refer to adults, but we did record a few larvae and exuviae in 2020. In addition to the records collected by us and other members of Hull Natural History Society, we engaged with members of the public via social media (mainly Twitter) encouraging them to submit records, and maintained interest by providing monthly blog posts. Overall, we had a total of 37 contributors in 2020 as compared with 24 in 2019.

For our survey, a record just means that a species was observed as being present at a site during a particular visit and often does not equate to the number of individuals seen. Differences in recording effort (e.g. number and timing of visits per site) could account for some of the differences in the records obtained for 2020 compared with 2019.

The total number of species recorded, 19, was the same as last year, with breeding evidence for 14 of them. The most commonly recorded and widespread species were Migrant Hawker (33% of records), Common Darter (16% of records), Blue-tailed Damselfly (15% of records), and Azure Damselfly (10% of records).

Most of the best sites for dragonflies highlighted in the 2019 report had more species than last year. Five sites had over ten species recorded in 2020: East Park, the top site in terms of number of species (13 sp), Noddle Hill Nature Reserve (12 sp), Paull Holme Strays (12 sp), Foredyke Green Pond (11 sp) and Beverley and Barmston Drain (11 sp.). An interesting site visited for the first time was Willerby Carr Dyke, a meandering flood alleviation ditch created in 2016 by skylighting (opening) a root-choked culvert. Although only six Odonata species were recorded, other species are expected to use this site which has a good variety of aquatic plants.

The highlights (for adults, unless stated otherwise) this year were as follows:

Willow Emerald Damselfly.

Records of this expanding species at two new sites: Beverley and Barmston drain (with several pairs in copula) and Humber Bridge Country Park, where multiple individuals were observed on several days in September. Although no oviposition was recorded, the suitability of the habitat and numbers of individuals seen suggests that this is likely to have been overlooked. However, there was no further sighting of the species at East Park lake where an individual was seen on two occasions last year.



Hairy Dragonfly presence at Beverley and Barmston Drain and ovipositing at Noddle Hill lake.

Emergence of **Four-spotted Chasers** at a private garden.

Willow Emerald in copula at the Beverley and Barmston drain

Migrant Hawker.

Exuviae were found, providing evidence of emergence, at East Park (there are very few previous records of exuviae of this species in VC61). Three individuals were flying in East Park on 20th October, which was the latest known date for an adult of this species in Hull.

Migrant Hawker exuvia at East Park.



Yorkshire Dragonfly Group

Brown Hawkers and **Emperors** had an excellent year, with many more records than in 2019, which was possibly associated with the warm spring (May was the warmest on record). However, there was a noticeable decrease in records for **Common Blue Damselfly** and **Common Darter** (although a very late individual was recorded on 13th November).

The model boating lake in East Park again had scores of **Small Red-eyed Damselflies**, with plenty of evidence of breeding. Breeding was also recorded at other sites including the pond at St Andrew's Quay retail park. In contrast, no evidence of breeding was observed for the **Red-eyed Damselfly** in either year, but it was found at two new sites in 2020.

The single sighting in May of a Large Red Damselfly at an ornamental pond with large fish and sparse vegetation suggests that there is an undiscovered breeding population in the Cottingham area.

A planned MSc on the larval Odonata in our survey area had to be modified due to Covid restrictions. The student, Bailey Durant, instead carried on a desk study on the variables responsible for adult Odonata diversity and species distributions in our survey area. The main results indicate that Odonata species richness was influenced by localised features of the ponds, such as emergent vegetation and size of surrounding green space, rather than landscape-scale features.

The study also identified that the presence of an individual species was positively correlated with one or more of the following parameters: abundance of emergent vegetation, increased pond size, absence of fish and the amount of other open water nearby. The results are valuable for guiding urban pond management for the benefit of Odonata diversity.

Although we do not plan to repeat the survey next year, we are considering the possibility of monitoring certain sites and/or species (eg **Willow Emerald Damselfly**). Also, hopefully another MSc student will be able to undertake a larval investigation.

The full report of our 2019 City of Dragons survey is available on the YDG website. We also intend to produce a report covering both years.

A big thank you goes to everybody who provided records and to YDG and Hull Nats for publicity. It has been particularly rewarding to see that our project has encouraged other people (individuals and community groups) to take an active interest in observing and recording these attractive insects.





Australian Emerald *Hemicordulia australie*

THE CREEK AT THE END OF THE ROAD:

A beginner's guide to the dragonflies and damselflies of Australia

Simon Joseph

Australia is an amazing country for Odonata enthusiasts, with over 320 species, many found nowhere else in the world. There are some remarkable living fossils resembling Permian and Jurassic species (Ancient Greenling, *Hemiphlebia miribilis* and the Petaltails *Petalurina*). Some are incredibly beautiful – particularly the flutterers, although I have yet to photograph one.

Photographing them all would be a monumental task as you would need to travel all over this vast country, during a range of flying seasons. Instead, I find it is best just to make sure I have my camera with me in case something interesting flies by.

I have visited New South Wales several times, to stay with family. As a casual tourist in two three-week holidays, filled with other activities I have photographed and identified 11 species, with very little effort and seen many others. Over 100 species have been recorded in and around Sydney, where I holiday, so every trip reveals new delights. I saw them in the Botanical Gardens, Chinese Garden of Friendship, various creeks including Manly, Mount Penang Gardens and Ku-Ring-Gai Chase.

When I first visited, I asked people to suggest good sites, as I would in the UK, but the commonest answer I got was “Any creek will do.” Sure enough, walks with my sister's dog, Egg, alongside the creek at the end of the road in Tascott, allowed me to photograph 8 species and watch several others.

Dragonflies and damselflies can be found anywhere there is a pond, creek or river. I've even seen one holding territory over a puddle in the street, and one checking out a bowl of water put out for a dog.



Gold Fronted River Damselfly *Pseudagrion aureofrons*

(*Xanthagrion erythroneurum*).

Repeated visits to Mount Penang Parklands have been rewarding, as there are a range of habitats suitable for dragonflies and damselflies, and a host of other wildlife. It also has a café where I can leave my long-suffering wife. There I photographed two beautiful and delicate damselfly species in cop – the Gold Fronted River Damselfly (*Pseudagrion aureofrons*) and the Red and Blue Damselfly

Species to look out for:

Australian Emeralds (*Hemicordulia australiae*) are common small dragonflies and rewarding to photograph as they hover during their patrol flights.

Fiery Skimmer (*Orthetrum villosovittatum*), Scarlet Percher (*Diplacodes haematodes*) and Blue Skimmer (*Orthetrum caledonicum*) are common and widespread, and often come to ground so are easy and rewarding to photograph.



Scarlet Percher *Diplacodes haematodes*

The Australia Emperor (*Hemianax papuaensis*), also known as the Yellow Emperor) rarely comes to ground but males patrol over short stretches of water so are not too hard to photograph on the wing.

Common Flatwing (*Austroargiolestes icteromelas*) are worth looking for because of their unusual habit of resting with the wings outstretched, well camouflaged but common.

For help identifying the ones you have seen, I recommend Günther

Theischinger and

John Hawking's excellent book *The Complete Field Guide to Dragonflies of Australia*, which describes 324 species from 18 families of dragonflies and 12 families of damselflies. Members of the Australian Dragonflies and Damselflies Facebook page have been really helpful.



Common Flatwing *Austroargiolestes icteromelas*



Male Fiery Skimmer *Orthetrum villositatum*

THE DRAGONFLIES AND DAMSELFLIES OF POTTERIC CARR

Jim Horsfall

Reserves Team Leader, South Yorkshire Wildlife Trust

Potteric Carr is large Yorkshire Wildlife Trust nature reserve on the outskirts of Doncaster, only three kilometres from the centre of town. The area was historically a wetland, with fen and marshland habitats. Early drainage attempts were largely unsuccessful, but in the eighteenth century Mother drain was cut draining much of the area. The last major 'improvement' to drainage was a new pumping station in 1980. The land was farmed for many years, but mining subsidence, and being bisected by railways (and latterly roads) saved the area from too much agricultural improvement. So many species survived in ditches and wet corners to recolonise as habitats were recreated.

From 1968 the site became a Yorkshire Wildlife Trust nature reserve, starting at just 13 hectares but slowly it's grown in size (now 235ha), and now has satellite sites around its edges (a further 47ha). The site has many drains and ditches, but also has lakes and ponds. Some of the ponds are borrow pits from the railway construction, and over 100 years old. Soil was dug out to make embankments, leaving long linear ponds alongside the railways. Dozens more ponds have been added in more recent times at Potteric Carr and the next door Carr Lodge nature reserve; some permanently wet other drying out some or most years.



The site sits on fen peat and clay but is fed by ground water that originates on the magnesian limestone to the west of Doncaster, so nowhere is the site acidic, and is in fact base rich (lots of magnesium in the soil). The peat soils of Hatfield Moor (a little way to the north east) are very different (acid), and so is the habitat. The base rich soil favours fen habitats (reeds, rushes and sedges), rather than bogs of Sphagnum moss and heather.

Although the site is over 50 years old few records survive from the early years. A comprehensive survey of all wildlife of a single pond (Loversall Delph) was undertaken by Derek Bateson in 2001 and 2002 which found 18 species of Odonata present (all the species that had been recorded anywhere on the reserve at that time).

Dragonflies and damselflies are now recorded regularly, and records added to the Potteric Carr sightings blog a couple of times a month during the main season. It has been eye opening to see the numbers on some days, with hundreds of damselflies and scores of dragonflies (if you are willing to walk the miles of paths).

Banded Demoiselle are seen on Mother drain, a slowly flowing drain, but the other species can be seen on any of the lakes, ponds and ditches around the site. There are a few ponds near the entrance, the so-called 'dragonfly ponds', that are a good place to start and easy to access if you don't want to walk too far. But a longer walk and views from bird hides and ditch sides can often yield 15 or more species on a good day in summer (25th June 2020 saw 17 species recorded!). To date 22 species have been recorded at Potteric Carr as more species move north.

Small Red-eyed damselfly has colonised the site from 2019 (and 100+ individuals have been seen in 2019 and 2020), but with climate change it is expected further species will move north. It's only a matter of time before Willow Emerald Damselfly makes it way north. Lesser Emperor has been seen a few times in recent years but is still suspected to be immigrant from the south rather than breeding. And the large pond at Loversall delph is full of water soldier, so Norfolk Hawker could become established one day (it is associated with water soldier). A couple of Norfolk Hawkers have been seen in Yorkshire at Spurn in recent years, but presumably from the continent. But given enough patience a breeding colony at Potteric Carr is possible.

Yorkshire Wildlife Trust volunteers and staff manage the site, including periodic clearing of scrub from pond edges, or dredging of ponds, to ensure the site remains suitable for a wide variety of species. Dragonflies and damselflies being a very visible indicator of health. Recently some of the scrub around Loversall Delph was cleared, with the hope of Norfolk Hawker, but the expectation of Common Darter, Black-tailed Skimmer and more.

Potteric Carr nature reserve is free to Yorkshire Wildlife Trust members, but there is a charge for non-members. There is plenty of car parking, a shop and café on site. See www.ywt.org.uk/potteric-carr-wildlife-sightings for recent sightings.

THE DRAGONFLY FAUNA OF SLOVENIA

**Matjaž Bedjanč, Damjan Vinko & Ali Šalamun,
SLOVENE DRAGONFLY SOCIETY**

Slovenia is a small, green country south of the Alps, characterised by beautiful landscapes with rich fauna and flora. Its position at the junction of the Mediterranean, Pannonian, Alpine and Dinaric biogeographic regions, and the wealth of different freshwater habitats, are the main reasons for its diverse dragonfly fauna of 72 species. Odonatological research in Slovenia has its origins in the second half of the seventeenth century, but has made significant progress only in the early second half of twentieth century by Prof. Boštjan Kiauta's numerous accounts on the dragonfly fauna of our country. Younger generations have additionally upgraded odonatological knowledge in the last 25 years, starting with activities around the publication of the Atlas of the Dragonflies (Odonata) of Slovenia in 1997 and continuing with numerous activities of the Slovene Dragonfly Society and its members until today.

Just a few kilometres south of the capital city, Ljubljana there is one of the most interesting areas in the country. Once the most famous marshland in southern Europe, the Ljubljana Moors (Ljubljansko barje) is today characterised by an



Slovenia is the best place to see Balkan Golden-ringed, species endemic to South-Eastern Europe. Ali Šalamun

extensive but beautiful agricultural landscape, criss-crossed by a dense and ecologically diverse network of drainage channels, ditches and streams. Among the more than 50 species recorded, the largest Slovene population of Yellow-spotted Emerald (*Somatochlora flavomaculata*) and Ornate Bluet (*Coenagrion ornatum*) are of special interest.

Early summer is the best time find the largest European dragonfly, Balkan Golden-ringed (*Cordulegaster heros*). It favours small, slow- to moderate-flowing forest streams, typical of the hilly country leading down to the flatlands.

As Slovenia is mostly hilly, Balkan Golden-ringed is quite common and as a result of targeted research in the last two decades the number of known localities for the



Male Balkan Emerald, southeastern sibling of Brilliant Emerald. Matjaž Bedjanič

species has already exceeded 1,000. With a little experience, it is almost impossible not to encounter this species, which is often accompanied by Beautiful Demoiselle (*Calopteryx virgo*), and sometimes also by Sombre Golden-ringed (*Cordulegaster bidentata*) and Balkan Emerald (*Somatochlora meridionalis*).

The latter is also very common, but prefers slightly larger, shaded and meandering streams in the lowlands. It is most frequently accompanied by Beautiful Demoiselle, Banded Demoiselle (*C. splendens*),

White-legged Damselfly (*Platycnemis pennipes*) and Small Pincertail (*Onychogomphus forcipatus*).

As a country on the sunny side of the Alps, northern Slovenia also has some of the southernmost European peat bogs to offer. The Pokljuka and Jelovica Plateaus in the Julian Alps as well as Pohorje Mts. in the northeast are worth visiting for good Common Hawker (*Aeshna juncea*), Northern Emerald (*Somatochlora arctica*) and Small Whiteface (*Leucorrhinia dubia*) populations.

Less than hour-drive from Ljubljana to the south, one of the greatest Karst curiosities, the Intermittent Lake Cerknica, can be visited. With its constantly changing image and close to 40 recorded species it is always interesting for all nature lovers.

The Slovene coast in the south-west is quite crowded in summer, however, the end of June might be a good time to visit the old saltpans in Sečovelje, the brackish lagoon and nature reserve Škocjanski zatok near Koper, or two claypit lakes in Fiesa near Piran.

Yorkshire Dragonfly Group

More than 40 dragonfly species have been recorded here, among which a good population of Small Red Damselfly (*Ceragrion tenellum*) in Fiesa has to be mentioned.

In the north-east of Slovenia, extensive fishponds Podvinci near Ptuj, the Komarnik reservoir near Lenart, and the Medvedce reservoir south of Pragersko each harbour more than 35 species. May is the best time to observe Eurasian Baskettail (*Epithea bimaculata*), which has been recorded at more than 80 sites in this part of Slovenia. In June, more than 30 species can be easily encountered during the weekend, including Yellow-spotted Whiteface (*Leucorrhinia pectoralis*), Green-eyed Hawker (*Aeshna isosceles*) and Red-eyed Damselfly (*Erythromma najas*).

Further to the east, the Mura river floodplain, with its oxbows and numerous gravel pits, represents another dragonfly hotspot with more than 50 species. Some of the older oxbows along the border section of the Mura, near Petišovci, are inhabited by both Western Willow Spreadwing (*Lestes viridis*) and Eastern Willow Spreadwing (*L. parvidens*), and some even support the endangered Green Hawker (*Aeshna viridis*), Lilypad Whiteface (*Leucorrhinia caudalis*) and Yellow-spotted Whiteface, while Green-eyed Hawker and Variable Bluet (*Coenagrion pulchellum*) are quite common.

We round up this short introduction with an official ECOO 2022 teaser – Slovenia is definitely the best place in Europe to see the enigmatic Balkan Golden-ringed and Balkan Emerald!

In 29 years, the society has had over a hundred members and implemented tens of different projects. Our main missions are to research the state of dragonflies in Slovenia, educate people about these beautiful insects, protect them and their habitats, as well as to exercise advocacy on the topic of nature and dragonfly conservation. We also publish two bulletins – odonatological Erjavčica and, together with seven other Slovenian NGOs, the magazine Trdoživ which is focused on nature in Slovenia. In 1997, we co-published the Atlas of the Dragonflies (Odonata) of Slovenia with the Red Data List. Our activities and interests are also international, most notably by (co)organising the Balkan Odonatological Meeting (BOOM) each year since 2011, which has twice been hosted also in Slovenia.

We are proud to be the host of several other international occasions, such as 1st Odonatological Symposium of the Alpine-Adriatic Region (1994), 14th International Symposium of Odonatology (1997) and, of course, the 6th European Congress on Odonatology (ECOO) held next year in 2022.



SLOVENE DRAGONFLY SOCIETY & ECOO 2022

The Slovene Dragonfly Society (SOD) was founded in 1992 with the aim to increase popularity of dragonflies and to connect dragonfly enthusiasts in Slovenia. In 29 years, the society has had over a hundred members and implemented tens of different projects. Our main missions are to research the state of dragonflies in Slovenia, educate people about these beautiful insects, protect them and their habitats, as well as to exercise advocacy on the topic of nature and dragonfly conservation. We also publish two bulletins – odonatological *Erjavecija* and, together with seven other Slovenian NGOs, the magazine *Trdoživ* which is focused on nature in Slovenia. In 1997, we co-published the *Atlas of the Dragonflies (Odonata) of Slovenia with the Red Data List*. Our activities and interests are also international, most notably by (co)organising the *Balkan Odonatological Meeting (BOOM)* each year since 2011, which has twice been hosted also in Slovenia. We are proud to be the host of several other international occasions, such as *1st Odonatological Symposium of the Alpine-Adriatic Region* (1994), *14th International Symposium of Odonatology* (1997) and, of course, the *6th European Congress on Odonatology (ECCO)* held next year in 2022.

The European Congress on Odonatology (ECCO) is a biennial European Dragonfly Symposium, held since 2010; the ECCO 2022 is the sixth congress to be held (with a break in 2020 due to Coronavirus disease). The key objective of our congresses is to advance the science of Odonatology in Europe (and the world), as well as of nature conservation, habitats, behavioural science, ecology, hydrobiology, etc. The ECCO explores opportunities and challenges for Odonatologists to meet each other and to communicate new knowledge of such a beautiful and interesting science as Odonatology certainly is. The ECCO 2022 will be held in Central Slovenia, from June 27th to July 1st 2022, followed by a 6-day field trip. For more information on the ECCO visit: <https://ecco2016.wordpress.com>.

Slovene Dragonfly Society/Slovensko odonatološko društvo
Verovskova 56, SI-1000 Ljubljana, Slovenia
E-mail: nabiralnik@odonatolosko-drustvo.si

YDG/BDS EVENTS 2021

The events listed will only take place if Covid restrictions have been lifted. Notification of changes will be posted on our website, Facebook group and via email.

Hopefully, we will be able to meet through the summer and additional events will be possible.

We will keep you posted!

Saturday 10th July

Strensall Common / Worlds End

Joint meeting with Freshwater Habitats Trust, to explore the numerous ponds of the Strensall Military Training Area and Worlds End SSSI. To date 19 species of Odonata have been recorded. Distance 3 - 4 miles.

Meet 10am at Galtres Road Car Park, SE648611

Leaders - Keith Gittens, Anne Carter

Bring a packed lunch, strong footwear recommended.

Contact - vc62@yorkshiredragonflies.org.uk, 07903 449509

Saturday 31st July

Skipwith Common NNR

Joint meeting with Freshwater Habitats Trust to explore the numerous ponds of this heathland nature reserve.

Leaders - Keith Gittens, Anne Carter

Meet 10am at the reserve car park at SE669377

Bring a packed lunch, strong footwear recommended.

Contact - vc62@yorkshiredragonflies.org.uk, 07903 449509

Sunday 15th August

Boltby Reservoir and Forest Ponds

Joint meeting with Cleveland Field Naturalists. Following recent conservation work at the reservoir an opportunity to see how the site and the dragonfly fauna are developing.

Leaders - Keith Gittens, Bill Hall

Meet 10.30am at the start of the forest drive, SE502871.

Bring a packed lunch, strong footwear recommended.

Contact - vc62@yorkshiredragonflies.org.uk, 07903 449509

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For all outings:

Under 18s are welcome with an accompanying adult, and with the agreement of the event leader.

For all outings, please bring lunch, binoculars and wear appropriate clothing.

Non-members are welcome – fee £2 per visit.

SPECIES LIST FOR YORKSHIRE

Breeding Species		
Scientific Name	Common Name	Status in Yorkshire
<i>Calopteryx virgo</i>	Beautiful Demoiselle	Restricted Range
<i>Calopteryx splendens</i>	Banded Demoiselle	Widespread
<i>Lestes sponsa</i>	Emerald Damselfly	Widespread
<i>Pyrhosoma nymphula</i>	Large Red Damselfly	Widespread
<i>Erythromma najas</i>	Red-eyed Damselfly	Restricted Range
<i>Erythromma viridulum</i>	Small Red-eyed Damselfly	Restricted Range
<i>Coenagrion puella</i>	Azure Damselfly	Widespread
<i>Enallagma cyathigerum</i>	Common Blue Damselfly	Widespread
<i>Ischnura elegans</i>	Blue-tailed Damselfly	Widespread
<i>Coenagrion pulchellum</i>	Variable Damselfly	Restricted Range
<i>Aeshna juncea</i>	Common Hawker	Widespread
<i>Aeshna mixta</i>	Migrant Hawker	Widespread
<i>Aeshna cyanea</i>	Southern Hawker	Widespread
<i>Aeshna grandis</i>	Brown Hawker	Widespread
<i>Anax imperator</i>	Emperor Dragonfly	Widespread
<i>Brachytron pratense</i>	Hairy Dragonfly	Restricted Range
<i>Cordulegaster boltonii</i>	Golden-ringed Dragonfly	Restricted Range
<i>Libellula quadrimaculata</i>	Four-spotted Chaser	Widespread
<i>Libellula depressa</i>	Broad-bodied Chaser	Widespread
<i>Orthetrum cancellatum</i>	Black-tailed Skimmer	Widespread
<i>Orthetrum coerulescens</i>	Keeled Skimmer	Restricted Range
<i>Sympetrum striolatum</i>	Common Darter	Widespread
<i>Sympetrum fonscolombii</i>	Red-veined Darter	Migrant – Occasional Breeder
<i>Sympetrum sanguineum</i>	Ruddy Darter	Widespread
<i>Sympetrum danae</i>	Black Darter	Widespread

Migrants, Vagrants and Ex-residents	
<i>Lestes dryas</i> - Scarce Emerald Damselfly (EX)	<i>Chalcolestes viridis</i> – Willow Emerald Damselfly (M)
<i>Ceragrion tenellum</i> - Small Red Damselfly (V)	<i>Aeshna isosceles</i> - Norfolk Hawker (V)
<i>Aeshna affinis</i> - Southern Migrant Hawker (V)	<i>Anax parthenope</i> - Lesser Emperor (M)
<i>Hemianax ephippiger</i> - Vagrant Emperor (V)	<i>Cordulia aenea</i> - Downy Emerald (V)
<i>Libellula fulva</i> - Scarce Chaser (EX)	<i>Sympetrum vulgatum</i> - Vagrant Darter (V)
<i>Sympetrum flaveolum</i> - Yellow-winged Darter (M)	<i>Leucorrhinia dubia</i> - White-faced Darter (EX)