Dragonfly Survey 2025
Vice County 66
Durham Wildlife Trust Region

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County Recorder VC66

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Summary

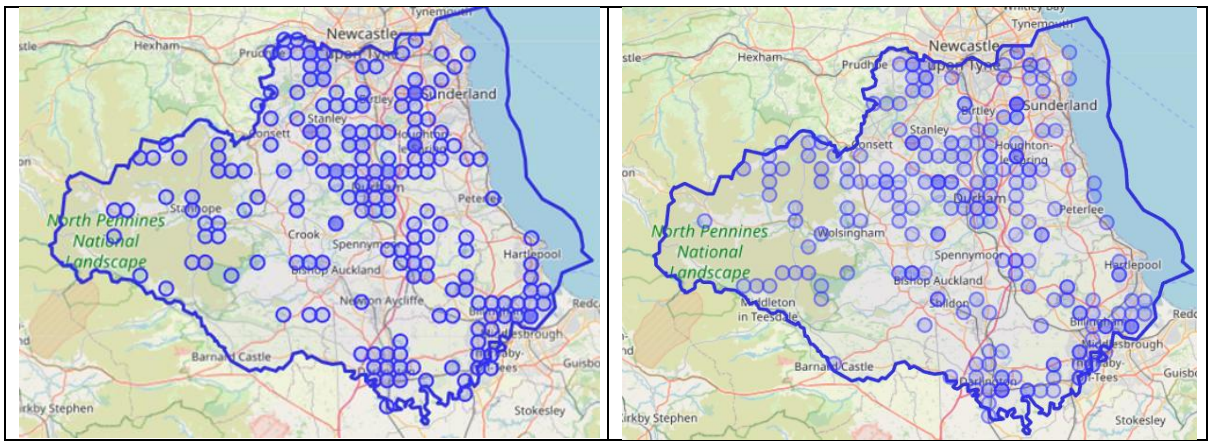
The British Dragonfly Society (BDS) works in conjunction with the Durham Wildlife Trust (DWT) to actively survey the region between the River Tees and the Tyne. This approach allows us to pay particular attention to a wide range of known sites via a dedicated app and to collect any other sightings within the region via iRecord and iNaturalist.

Following two years of very wet and cool summers, 2025 was dry, warm, overcast and changeable during the Summer months, and overcast and windy in the Autumn. This resulted in 2439 sightings (as opposed to how many Odonata emerged), which is down from 3932 sightings during the last warm, dry year 2022, and also down from 2024's numbers. Most shallow ponds dried out early in the season and were not replenished until well after most species had finished for the year. Therefore, the focus in 2025 was on larger, and sometimes far more "ornamental" ponds than has typically been the case. DWT completed limited work in the Autumn to address succession in some shallow ponds, but this work will need to be ramped up in 2026 if they are to continue to attract Odonata.

In recent years, 19 resident species have been recorded in VC66, plus occasional vagrants. However, as of 2025, the number of resident species has increased to 20, with Willow Emerald Damselflies now firmly established (51 sightings at a range of sites across the region). The confirmed sightings of a single Lesser Emperor and Norfolk Hawker brought this year's total to 22 species.

Small Red-eyed Damselflies are still being seen frequently, though this year's sightings were affected by the shallow ponds where they were so often seen in 2024, drying out early in the season. Hundreds, however, were seen at Brasside Pond, the location where they first appeared in VC66, so they remain well established.

The season started early, with a Blue-tailed Damselfly on April 7th, and took off in earnest as always, with Large Red Damselflys, this year on 20th April. The first Dragonfly (Four Spotted Chaser) was seen on the 26th April, continuing the early emergence theme. The overall distribution of sightings differed slightly from 2024 (see below), mainly because shallow ponds dried out so quickly.



2024 Sightings ***2025 Sightings***

As the survey was, until recently, focused mainly on Durham Wildlife Trust reserves, there are still many sightings at those great sites, particularly at Rainton Meadows, which remains a BDS hotspot with 17 species, including the Willow Emerald Damselflies. The number of species was matched by Maidendale Nature Reserve near Darlington and Barnston Nature Reserve near the Nissan plant. Both had few sightings in earlier years, but the increase is not due to habitat change but to a couple of local spotters visiting regularly. This shows that many of the known (and "unknown") sites in VC66 could actually host far more species than have been recorded.

In 2025, four BDS/DWT guided walks were run, and it is hoped that far more will go ahead in 2026. Events will be on the Durham Wildlife Trust's Events page and circulated by the BDS. My thanks, as always, to those who submitted sightings.

Cover photo Michael Coates. Survey tool courtesy of Protostar Surveys

Background and Weather

For some years, the Durham Wildlife Trust has surveyed Odonata at its 50+ sites along with nearby nature corridors. That survey is now combined with the records submitted via iRecord to create this joint BDS/DWT report.

The VC66 area essentially covers the north-east between the rivers Tees and Tyne, meaning that species are occasionally seen in Newcastle and recorded as VC67. So, for a full picture of the north east, both reports should be considered.

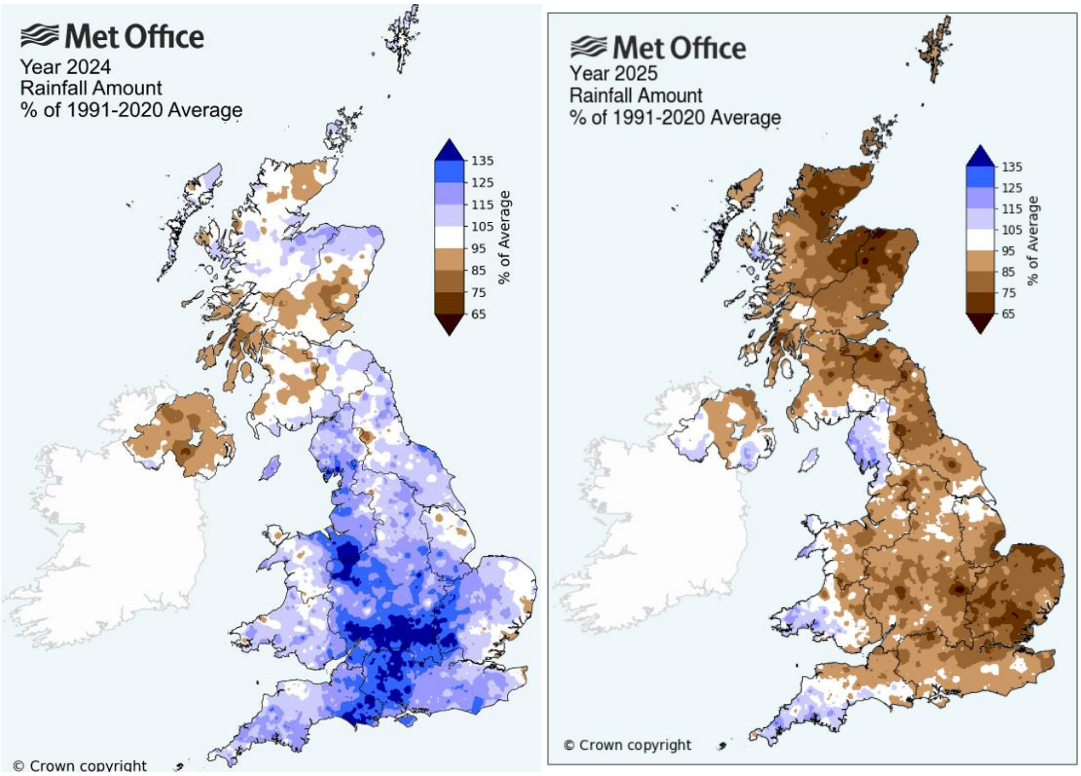
The northeast of England generally has a cooler climate than the rest of England, and, to some extent, that is why we have fewer species and hotspots. It is certainly responsible for the shorter season than in the south. However, annual temperatures have been rising in recent years, and rainfall has become less predictable, with long dry spells often followed by flooding. The milder weather is likely responsible for hitherto southern species, such as the

Willow Emerald and the Small Red-eyed Damselfly, now successfully breeding in the northeast.

There were fewer sightings recorded in 2025 than in 2024, and far fewer than in the last hot year, 2022, which is not an indication of Odonata numbers dropping, but rather a link between milder weather, clear blue skies, and observers visiting sites. The season started early, partly because April was the sunniest since records began; however, this meant shallow ponds soon dried out, as there was only 7% of the typical rainfall in VC66.

The sun continued into May, and we experienced the sunniest Spring on record, with 630 hours of sunshine. However, despite June also being the warmest on record, the weather was very unsettled, and anecdotally, this was when Odonata observers started reporting that they were visiting sites and seeing nothing, or finding it difficult to plan visits due to the wind and changeable weather. While there was a UK heatwave in July, the North East weather remained warm but cloudy, and August brought regular storms, and that unsettled weather continued into September.

Two of the planned dragonfly walks in VC66, and a further two in VC67, were washouts (although we still saw Odontata), the first year this has happened. October brought Storm Amy and was one of the dullest on record. Therefore, the warm weather, in the north east at least, was not as conducive to spotting dragonflies as it was in 2022, partly because it was often overcast and changeable. Combined with many ponds drying out, observers found it more difficult to record sightings.



The graphics compare the two Met Office summaries, showing average rainfall against the national average for 1991-2020. In the left-hand graphic, the blue area indicates that, in

2024, most areas of the UK, including the North East, received more than the typical average rainfall. In 2025, the brown colour shows how the UK, and in particular the North East, had far less rain than is typical. While sightings were down as a result, ponds were full as we entered winter, and they have maintained that water, which bodes well for egg laying but not emergence in 2026.

Method

There are three methods for recording sightings. Firstly, using an application developed by the author for reporting sightings at DWT sites and other hotspots.

For 2026, use this URL to access it https://survey.protostarsurveys.com/zs/Qwtn9I

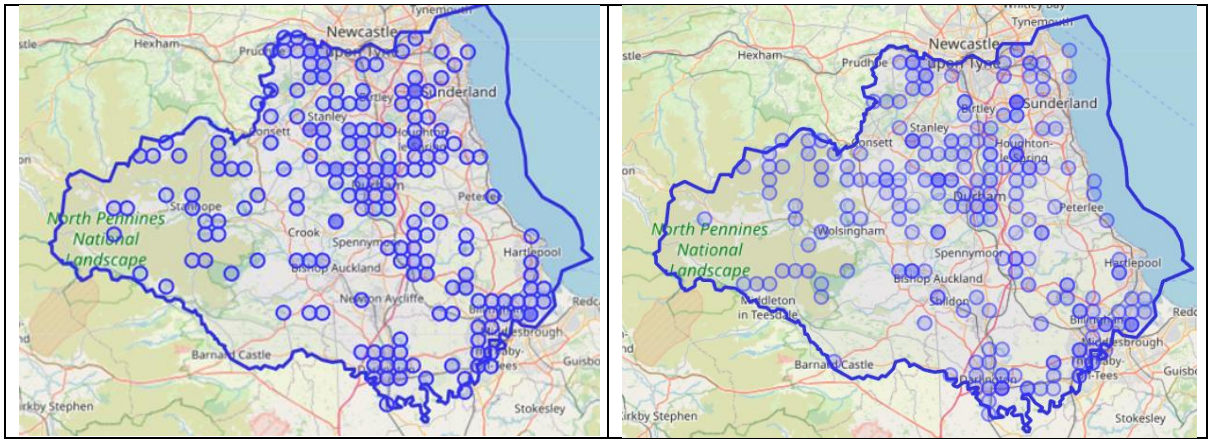
Or use this QR code.

Odonata sightings registered in iNaturalist were also automatically submitted to iRecord, along with a photo. The main method is via iRecord, in which all the DWT data is uploaded at the end of the season. While the iRecord data is used in national studies, it has a pretty limited reporting capability compared to the DWT app, hence running both methods in our region.

Whatever the submission method, photographic evidence is encouraged, even for common species, as it is easy to make mistakes and provides a great source of images. If a record was submitted by a new observer for a “scarcer” species and no photographic evidence was provided, the author would usually visit the exact location to confirm. As this is not always possible, photographic evidence is encouraged, especially for rarer species.

Locations

Despite the somewhat warm but disappointing summer weather, observers still visited a wide range of locations and submitted sightings. Typically, there is a heavy emphasis on the centre of the region, but in 2025, the spread was broader, including the western areas that are often more difficult to walk in.



2024 (left)/25(right) Odonata Sightings in VC66

Only eight DWT reserves were surveyed; in 2026, spotters are urged to visit them more often. In recent years, despite being a well-visited location, Low Barns Nature Reserve had very few recorded sightings, simply due to a lack of sighting submissions. In 2025, a few keen spotters visited, and 14 species were observed, again, showing that to get a true reflection of species diversity at a site, regular visits are required.

Locations with more than five species recorded are listed on the next page.

Location	Map Reference	Number of Species
Maidendale Nature Reserve	NZ312133	17
Barmston Nature Reserve, Washington	NZ32715731	17
Rainton Meadows Nature Reserve	NZ32524836	17
Washington Wildfowl Reserve	NZ33655644	17
Langley Park Wetlands	NZ2145	16
RSPB Saltholme	NZ50582314	16
Oakenshaw Nature Reserve	NZ20663698	15
Low Barns Nature Reserve	NZ15903149	14
Greencroft NR, Anfield Plain	NZ16355122	14
Rainton Meadows Joes Pond DWT	NZ32844865	14
Amphibian Ponds	NZ33665641	13
Snipe Pond, Darlington	NZ286123	12
Red Hall NR Darlington	NZ31961538	12
Twizell Woods	NZ22615159	11
Wynyard Hall, Co. Durham	NZ420256	11
Stargate Ponds	NZ16416323	11
Ropner Park, Stockton-on-Tees	NZ432184	11
Coatham Woods	NZ398160	11
Daisy Hill NR	NZ25114894	10
Dorman's Pool, Teesmouth	NZ5122	10
Hardwick Park	NZ34532910	10
Belasis Business Park, Coxwold Way, Billingham	NZ476234	10
Gibside National Trust	NZ18055876	10
Barlow Burn NR DWT	NZ15986206	9
Mount Pleasant Park	NZ31575404	9
Clockburn Lake, Derwent Trail	NZ18436027	9
Boldon Fell Bottom Pools	NZ31716008	9
Chapmans Well Pond	NZ1850	9
Tilery and Brierley Woods, Wynyard	NZ4028	8
Malton Ponds DWT	NZ18244581	8
Brasside Pond Durham SSI	NZ29144547	7
Wingate Quarry LNR	NZ3737	6
Muggleswick Common, Hisehope	NZ025462	6
Sunnyhill Country Park, Hartlepool, large pond	NZ481313	6
Hylton Dene, Sunderland	NZ364585	6
Darlington Red Hall Ponds	NZ319153	6
Fighting Cocks Reservoirs, Middleton-St-George.	NZ34151376	6
Bowesfield Nature Reserve	NZ445164	6
Charlton's Pond, Billingham	NZ466231	6
Brankin Moor Nature Reserve	NZ30471264	6
Hairhope Quarry/Bolihope Burn, Frosterley	NZ03713631	6
Barmston Nature Reserve (Washington)	NZ32695735	5
Pelaw Quarry Ponds LNR	NZ31086265	5
Ellemore Country Park	NZ35214639	5
Waskerley Reservoir & Moor	NZ02304439	5
Shibdon Pond NR	NZ194626	5
Bishops Fen	NZ332302	5
Bowes Valley NR (Kibblesworth Brickworks)	NZ252561	5
Hartburn Brick Pond, Stockton-on-Tees	NZ432177	5
Castle lake	NZ3230	5

Of particular interest is a new site, Stanley Moss Stanley Moss | Durham, which has bogland and shallow pools. In 2025, only one observer visited on a single occasion, so we are lacking a baseline measure for this site. Details of all sites can be found at https://www.durhamwt.com/nature-reserves.

The British Dragonfly Society (BDS) denotes a site in the North East to be a "Priority Site" if it has:

- Nationally scarce species breeding
- Locally scarce species breeding
- 14 or more species

The Small Red Eyed Damselfly was, until 2024, considered to be a very rare locally breeding species, with just two confirmed sites, however, they were seen at numerous sites across both VC66 and 67 in 2025, so it is likely this species will drop from the "locally scarce" list.

Within VC66, the following sites are considered "Priority"; however, as other great DWT sites were hardly surveyed, it is quite possible that they also meet the criteria.

- Brasside Pond and Rainton Meadows – Small Red-eyed Damselfly
- Rainton Meadows (17 species and Willow Emerald Damselflies)
- Maidendale Nature Reserve (17 species)
- Washington Wildfowl Trust Reserve (17 species)
- Barmston Nature Reserve, Washington (17 species)
- Langley Park Wetlands (16 species)
- RSPB Salthome (16 species)
- Oakenshaw Nature Reserve (15 species)
- Low Barns Nature reserve (14 species)
- Greencroft NR, Anfield Plain (14 species and Black Darters)

It is always interesting to see when a spotter finds a new site and visits regularly, highlighting that hitherto, it was a hidden gem. Two in particular stand out this year. Maidendale Nature Reserve in Darlington, which is ironic as the author worked for many years just a stone's throw away and was unaware of it, plus the intriguingly named "Amphibian Pond" that several observers visited. According to the map reference, this appears to be a specific pond at the Washington Wildfowl Trust reserve, contributing to the reserve's 17 species.

Account of Species

Species by Number of Recorded Sightings (Times Observed)

NB: A sighting/record means at least one was seen, it is not the quantity observed.

Accepted name	Common name	No. of records	First record	Last record
Sympetrum striolatum	Common Darter	384	02/06/2025	12/11/2025
Ischnura elegans	Blue-tailed Damselfly	228	07/04/2025	28/09/2025
Coenagrion puella	Azure Damselfly	199	30/04/2025	17/08/2025
Pyrrhosoma nymphula	Large Red Damselfly	188	20/04/2025	17/08/2025
Enallagma cyathigerum	Common Blue Damselfly	179	01/05/2025	09/09/2025
Libellula quadrimaculata	Four-spotted Chaser	145	26/04/2025	25/07/2025
Aeshna mixta	Migrant Hawker	141	30/07/2025	22/10/2025
Aeshna cyanea	Southern Hawker	133	08/06/2025	02/11/2025
Libellula depressa	Broad-bodied Chaser	111	28/04/2025	21/09/2025
Anax imperator	Emperor Dragonfly	107	23/05/2025	18/09/2025
Cordulegaster boltonii	Golden-ringed Dragonfly	94	13/06/2025	06/09/2025
Aeshna grandis	Brown Hawker	91	30/06/2025	06/10/2025
Calopteryx splendens	Banded Demoiselle	83	09/05/2025	31/08/2025
Lestes sponsa	Emerald Damselfly	78	24/04/2025	28/09/2025
Aeshna juncea	Common Hawker	71	21/06/2025	08/10/2025
Chalcolestes viridis	Willow Emerald Damselfly	58	13/08/2025	12/10/2025
Orthetrum cancellatum	Black-tailed Skimmer	53	11/05/2025	25/08/2025
Sympetrum danae	Black Darter	32	08/07/2025	30/09/2025
Sympetrum sanguineum	Ruddy Darter	32	08/07/2025	16/09/2025
Erythromma viridulum	Small Red-eyed Damselfly	30	18/06/2025	09/09/2025
Aeshna isoceles	Norfolk Hawker	1	10/07/2025	10/07/2025
Anax parthenope	Lesser Emperor	1	16/07/2025	16/07/2025

Species in VC66 in order of Emergence

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Ischnura elegans	Blue-tailed Damselfly	228	07/04/2025	28/09/2025
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Azure Damselfly (Coenagrion Puella)

Azures were spotted on 199 occasions (up from 118). The increase is partly due to being seen at 62 sites (up by 20).

Photo Michael Coates

Azures were seen in good numbers at Oakenshaw Wildlife Reserve, Rainton Meadows, Washington Wetland Centre, Twizell Woods, and across the region's centre.

In the photo above, you can easily see three of the distinctive identification features that help distinguish them from the Common Blue Damselfly, namely the “coenagrion spur” on the side of the thorax (a black line that only partly covers the side), A black cup shape on S9 and unlike most of the other blue damselflies, the blue on top of their eyes is not connected by a straight blue bar.

They thrive around ponds, lakes, canals, ditches, and slow rivers, particularly where there’s plenty of aquatic vegetation for egg-laying. In the UK, Azure Damselflies are usually on the wing from April to September, making them one of the earliest damselflies most people encounter each year.

Their larval stage lasts up to two years underwater, feeding on tiny aquatic creatures. As adults, they live for only a few weeks, spending almost all their time feeding and breeding. Because they rely on clean, well-vegetated water, their presence is often a good sign of a healthy freshwater habitat. Azure Damselflies do well in urban parks, garden ponds, and restored wetlands, as long as the water quality is decent.

After mating, the male often guards the female as she lays eggs, reducing the chance of another male mating with her. This is helpful for identification purposes, as the females have three colourations which can be confusing.

1. Blue form (androchrome) See photo on previous page

- Looks very similar to the male: bright blue with black markings.
- Often mistaken for a male at first glance.
- This form is thought to reduce harassment from males, because she blends in with them.

2. Green form (gynochrome) — the most common

- The classic female look and much easier to tell apart from males than the blue form.
- Pale greenish body with black markings, sometimes appearing yellow-green when freshly emerged.

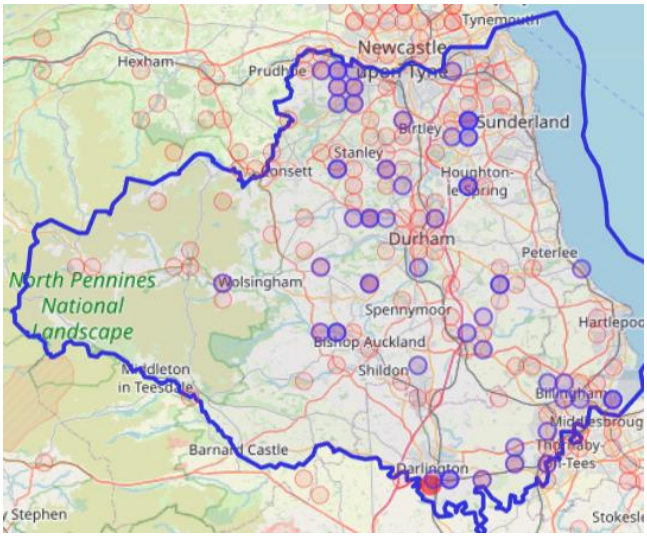
Photo Malcolm Short

3. Brown/Violet (teneral)

- Appears dusky violet or brownish-purple, especially when young.
- Colours change with age.
- Less frequently seen, so often noted as “unusual” by observers.

Photo Malcolm Short

The sightings map clearly shows that most were in a central corridor, so in 2026, spotters are also asked to go further west.



2025 Azure Damselfly Sightings VC66

NB: The blue circles in the distribution maps used in this report represent the locations of 2025 sightings. The pink lighter circles represent previous years. i.e., it shows 2025 in blue, and pink indicates the typical areas they have been seen in. This might help readers to plan where to visit or what to look out for. However, where ethere is tight consistency between years it creates a purple circle as the blue and red overlay.

Banded Demoiselle (Calopteryx splendens)

Photo: Tim Burton

The Banded Demoiselle is a particularly striking damselfly, which is probably why, in some countries, it is called a Banded Jewelwing. They have metallic blue or green bodies and partly tinted wings. The males have a distinct dark band in their wings (see photo below).

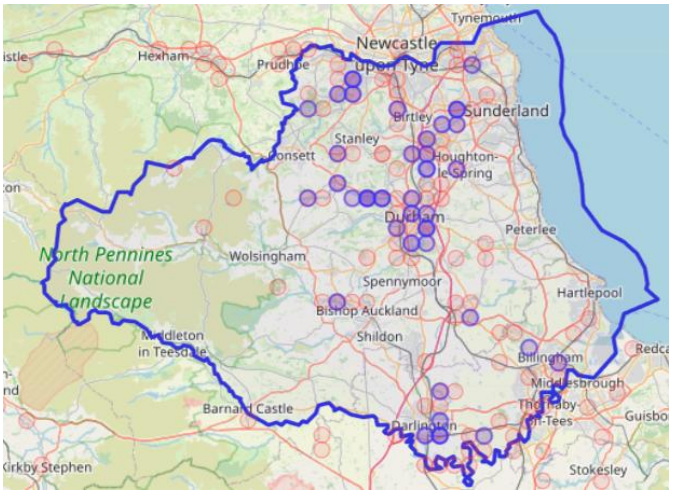
Photo: John Dixon

In the UK, the Banded Demoiselle is most commonly found along slow-flowing rivers, streams and canals, but it may also occur around lakes and ponds where there is abundant marginal and aquatic vegetation. It is widespread and common across England, Wales and Northern Ireland, with records showing a gradual northward expansion, although it remains less frequent in Scotland. The species is closely associated with clean, well-vegetated freshwater habitats and is sensitive to pollution and significant habitat disturbance.

Adults are typically on the wing from May to August, occasionally extending into early September in favourable conditions. Breeding takes place in and around water, with females laying eggs into the stems of aquatic plants. The larvae live underwater for around two years before emerging as adults. Males are territorial during the breeding season and can

often be seen performing slow, fluttering display flights to deter rivals and attract females, making the Banded Demoiselle a conspicuous and informative species in UK odonata sightings and freshwater monitoring.

The season started like most species, a little earlier than in 2024, on 9th May and were last observed on 31st August. In total, they were recorded on 83 occasions, so they are relatively common. As a reminder, the pink circles indicate previous year sightings, and the blue circles 2025. If you look at the top, for instance, you will see the circles follow the River Tyne.



2025 Banded Demoiselle Sightings VC66

Black Darter (Sympetrum danae)

Photo: Christopher Bill

Black Darters were seen on 32 occasions between 08/07/2025 and 30/09/2025. They were still common at their stronghold at Greencroft NR (Anfield Plain). As they prefer boggy ground, it was unsurprising that they were also seen in areas such as Waskerley Moor, however, they can be seen at Maidendale Nature Reserve, Langley Park Wetlands and also at Boldon Flats, which has recently been leased to DWT to manage.

Black Darters are the UK's smallest resident dragonfly and are strongly associated with acidic peatlands, including blanket bogs, moorland pools, seepages and old peat cuttings. As a result, its presence is often used as an indicator of relatively intact bog and heathland systems.

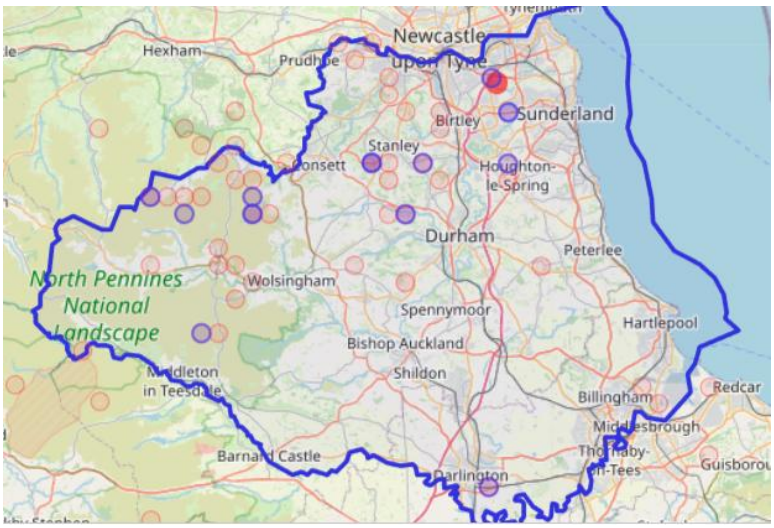
In appearance, males are easily recognised by their velvety black bodies with contrasting yellow markings on the legs and thorax, while females and immature individuals are yellow-brown with darker patterning. Despite their small size, Black Darters are often conspicuous, frequently perching on low vegetation, bare peat or fence posts, and returning repeatedly to the same vantage point. Their low, darting flight close to the ground is typical and well-suited to exposed, windy moorland conditions.

In the North East of England, Black Darters are most often recorded on upland sites, including moorlands and bog complexes in Northumberland and the Durham uplands, though occasional records also come from lowland bog remnants where suitable conditions persist. Adults are usually on the wing from late July through October, making them one of the latest-flying UK dragonflies and a regular feature of late-season Odonata records.

From a recording perspective, Black Darter records are valuable because the species is sensitive to hydrological change, drainage and peatland degradation. Changes in distribution or abundance over time can therefore provide useful insight into habitat condition and management outcomes. For annual Odonata reports in the North East, documenting Black Darter sightings helps build a clearer picture of the status of upland wetland habitats and the effectiveness of peatland restoration and conservation efforts. (*Photo: Mal Wilkinson)*

Both sexes are golden in colour when immature, which can lead to misidentification. With immature males and females, look for dark markings on the top of S8-10. Males have a nipped "waist" around S3, and their legs are completely black. Both sexes, when "old", go completely black.

As shown in the distribution maps, the 32 sightings were concentrated at a few locations, but in recent years, they have been observed at more locations.



Black Darter Sightings VC66 2025

Black-Tailed Skimmer (Orthtrum cancellatum)

Black-tailed skimmers were spotted on 53 occasions, down from 73. This is most likely because they are often seen when laying eggs on the “shore” of a pond, and many dried out. Also, females tend to lay on dirt and yellow grassy areas, making them hard to see and, again, the drought made such areas more commonplace.

They were seen at 27 sites, including Oakenshaw NR, RSPB Salthome, and Rainton Meadows.

Photo: Christopher Bill

Their preference for being on the ground begins very early, as they may travel some distance over land to find a suitable site to “emerge”; hence, it is relatively rare to find their exuvia on vegetation in a pond.

From a conservation perspective, the Black-tailed Skimmer is considered common and not currently threatened in the UK. Its adaptability to man-made water bodies has helped buffer it against some habitat loss that affects more specialised dragonfly species. However, local populations can still be impacted by poor water quality, excessive shading, or aggressive bankside management that removes open margins. As a result, it is often used as an indicator of healthy, well-managed lowland freshwater habitats.

Like most Dragonflies, they emerged earlier than normal, on 11th May and were still being seen on 25th August.

Black Tailed Skimmer Sightings VC66

Blue Tailed Damselfly (Ischnura elegans)

Very unusually, a Blue-tailed was the first species recorded in 2025 (normally it's Large Reds), and that was very early in the year on 7th April. This was a sign of things to come as the very warm April encouraged early emergence.

Photo: Michael Coates

Despite being in decline in the UK for some years, and officially classified as “near threatened”, they were the 2nd most frequently observed Odonata in VC66. Their resurgence could be due to restrictions on the use of neonicotinoid insecticides. These chemicals are highly soluble and mobile in soils, so they readily enter surface waters through runoff and drainage. Experimental

research indicates that field-realistic concentrations of these insecticides can reduce damselfly feeding, growth and survival from larval to adult stages, even in species as seemingly robust as the Blue-tailed Damselfly. Such sublethal effects can reduce adult emergence and ultimately lower reproductive success, contributing to local declines over time.

The connection between neonicotinoid pollution and odonate declines is supported by correlation in long-term records: the period of widespread neonicotinoid use since the early 1990s aligns with declines in Blue-tailed Damselfly populations in some regions of the UK. However, it's important to recognise that multiple pressures act together, including habitat loss, water quality degradation, and climate-related changes to aquatic ecosystems, so insecticides are one of several drivers rather than the sole cause.

In 2025, the UK government moved to strengthen restrictions further by tightening guidance on emergency authorisations and refused a high-profile application for emergency use of neonicotinoid pesticides. This marks a shift towards fully upholding the ban and ending routine emergency exemptions granted for several years. In any event, they appear to be doing far better in VC66 than in previous years.

The name "Blue-tailed" relates to the blue ring on the males' S9. Females, however, demonstrate polymorphism and have 2 genetically distinct morphs

Typica *(= Androchrome)*

- Male-like blue and black
- Genetically distinct morph

Infuscans *(= Gynochrome)*

- Greenish-brown
- Genetically distinct morph

However, in the field, we refer to there being five forms, as the colours also vary with age.

Field ID Decision Tree (Females)

1. Does it look blue and male-like at first glance?

Photo Rod Smith

Look for:

- Bright blue thorax sides
- Strong black markings
- Clear blue segment 8 ("blue tail")

If YES → Typica (androchrome female)

If NO → go to **2**

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2. Does the thorax show obvious pink, salmon, or reddish tones?

Look for:

- Warm pink or reddish wash on thorax or abdomen
- Fresh, clean colouration

If YES → go to **3**

If NO → go to **4**

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3. Reddish female – how fresh does it look?

Photo Sandra Neeley

Strong pink/salmon colour

- Dark markings are sharp and high contrast
- Overall appearance fresh

→ **Rufescens (immature gynochrome) See photo above**

Colour faded toward buff or brown

- Markings softened
- Overall duller appearance

→ **Rufescens-obsoleta (mature rufescens)**

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4. No red tones – green/brown or grey overall?

Olive or green-brown thorax

- Dark shoulder stripes clear
- Moderate contrast

→ **Infuscans (mid-age gynochrome)**

Greyed, washed-out appearance

- Shoulder stripes faint or blurred
- Low contrast overall

→ **Infuscans-obsoleta (fully mature gynochrome) see photo on right** (*C. Bill*)

Useful Cross-checks (when uncertain)

Segment 8 ("blue tail")

- Bright blue → typica
- Dull blue, grey, or greenish → gynochrome forms

Overall contrast

- High contrast → younger females (rufescens, infuscans)
- Low contrast → obsoleta forms

Common confusion

- Rufescens-obsoleta vs infuscans-obsoleta: both appear dull and brown-grey
- Ask: *Did this individual ever look pink?*

If you cannot confidently separate **rufescens-obsoleta** from **infuscans-obsoleta**, record as: **Female – gynochrome (obsoleta)**

2025 Blue Tailed Damselfly Sightings VC66

Broad Bodied Chaser (Libellula depressa)

Photo: Michael Coates

The Broad-bodied Chaser is one of the earliest dragonflies to emerge in spring, and in VC66 that occurred on April 28th and they remained until 21st September.

Adult males, as shown in the photo, develop a striking powder-blue abdomen caused by a waxy bloom that helps reflect sunlight and signal maturity. Broad-bodied Chasers readily colonise newly dug ponds, often arriving within the first year, and the males are highly territorial, aggressively chasing away rivals—including much larger dragonflies.

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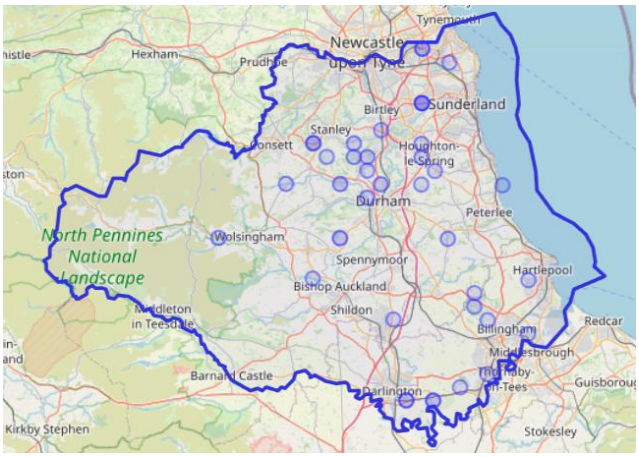
Females are very distinctive, partly due to their gold colouration, but also, unusually, they lay eggs by flicking them onto the water surface while hovering, rather than dipping the abdomen.

They were spotted at 41 sites (up from 29) on 111 occasions (up from 72). They were most frequently spotted at Washington Wildfowl Reserve, Oakenshaw NR and Langley Park Wetlands.



2025 Broad Bodied Chaser Sightings VC66

Brown Hawker (Aeshna Grandis)

Photo Malcolm Short

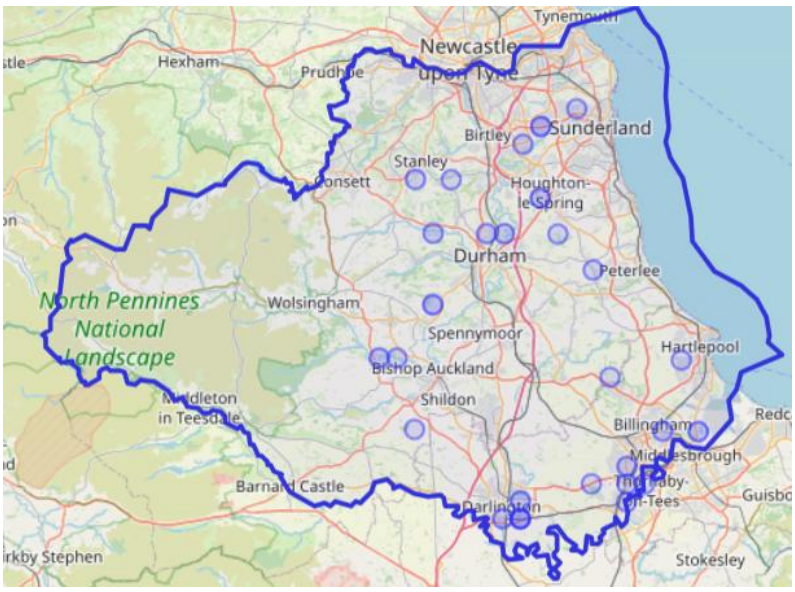
The Brown Hawker is the largest hawker dragonfly in the UK, with a wingspan that can exceed 10 cm. It's easily recognised by its uniform brown body and amber-tinted wings, unlike other blue- or green-marked hawkers.

While both genders are brown with amber wings, the male has a nipped waist and blue-tinted eyes, while the female's eyes are yellowish brown. If in doubt about the sex, get a photo of S10 and consult a field guide, as their appendages are quite different.

They are late-season dragonflies, flying mainly from July to October.

Brown Hawkers are powerful fliers that often patrol woodland trails, lakes, and rivers, sometimes far from water. Females lay eggs by inserting them into rotting wood or plant material near water rather than directly into open water, so a tip for attracting them is to add an old, gnarled log with rough bark, partially submerged in your pond.

They were observed on 91 occasions (up from 71) between 30th June and 6th October, with some of the later sightings most likely being migrants from Europe.



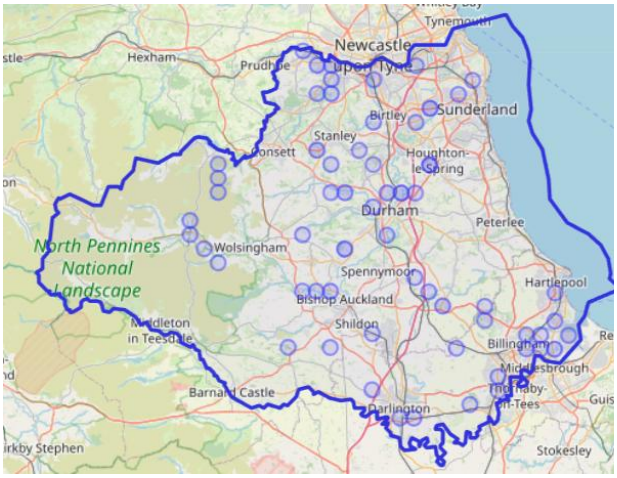
2025 Brown Hawker Sightings VC66

Common Blue Damselfly (Enallagma cyathigerum)

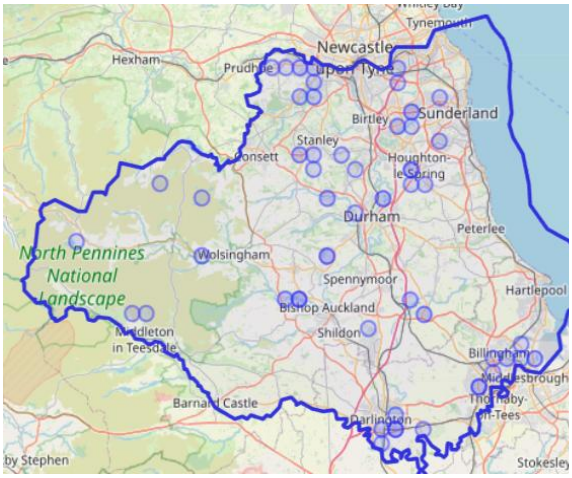
Photo Sandra Neely

While generally regarded as the UK's most commonly seen damselfly, in VC66 they have ranked between 2nd and now 5th. If you look at the distribution maps for 2024 and 2025, you will see that they were also seen at fewer locations.

The main sites were Oakenshaw, Low Barns and Brasside Pond. It could be that observers see them as being common and so don't submit a sighting, but why this would vary year on year is unknown.



2024 Common Blue Damselfly



2025 Common Blue Damselfly

The variation in sightings might be due to this species being sensitive to changes in water quality and habitat structure. Researchers consider it a useful indicator of the health of a freshwater environment. Its broad distribution across the UK and Europe, along with its sensitivity to environmental change, means that shifts in its numbers can help signal the effects of climate change and habitat loss.

More generally, research shows that it plays an important role in freshwater ecosystems because it preys on smaller insects and is eaten by fish and other larger aquatic predators, helping keep the food web in balance. Scientists have also found that its larvae prefer areas with plenty of underwater plants, which provide hiding places and hunting grounds, and these plant-rich areas help protect them from predators.

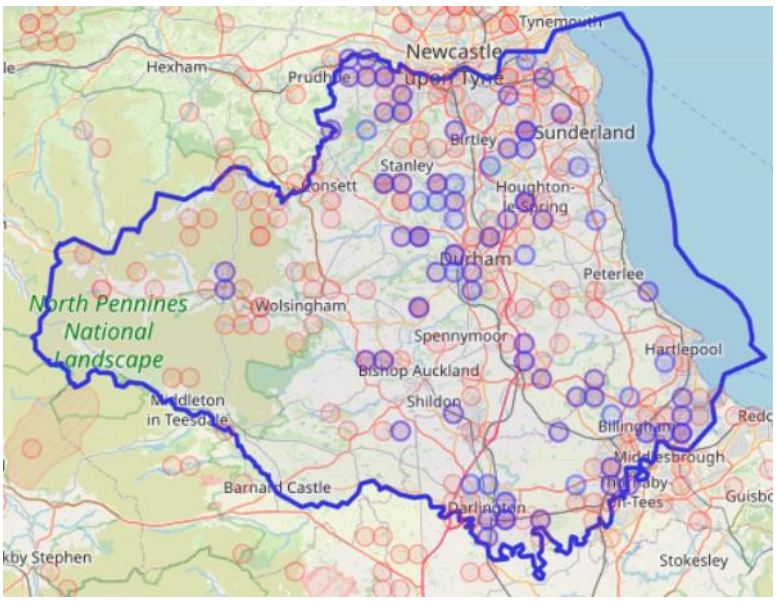
Common Darter (Sympetrum striolatum)

Common across the UK, this was, once again, the most frequently observed Odonata in the VC66 region. However, there was a sharp drop from 520 sightings to 384. With 283 sightings in 2023, this could indicate that the species thrives more in certain weather conditions, or it could simply reflect where and when observers ventured out, i.e., natural variation.

Photo: Michael Coates

Another possible reason is that they are migratory, and summer numbers often increase with European migrants, so the ups and downs may be due to migration rather than native breeding.

They were first spotted on 2nd June and, as usual, were the last to be seen, this time on 12th November. As a general rule, the Odonata season ends after the second hard frost, which occurred in early November. Despite Common Darters being able to withstand temperatures below 12 degrees (unlike other Odonata), those frosts were too much for them.



2025 Common Darter Sightings VC66

Common Darters have been the subject of extensive research and filming, and readers are encouraged to refer to the 2024 report for a summary.

Common Hawker (Aeshna juncea)

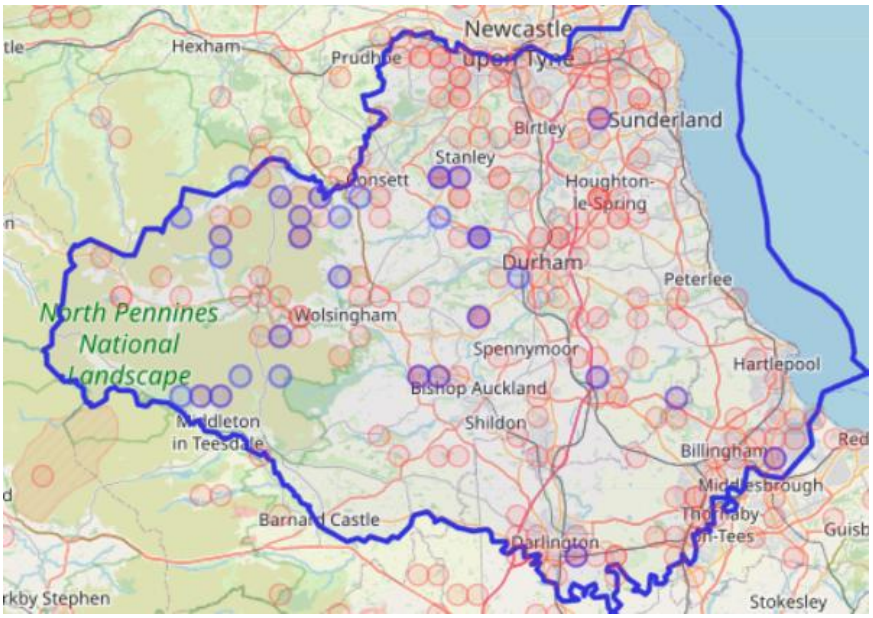
Despite their name, they are not normally common in VC66. However, in 2024, they were seen on 71 occasions (down from 94) between 21st June and 8th October.

As they are relatively rare, spotters are advised to visit Langley Park Wetlands, where they were observed 22 times. To put that in context, the next highest set of observations was 7 sightings at Greencroft Nature Reserve.

In Mal Wilkinson's photos, you can clearly see the yellow costa (front wing edge), which is often the easiest way of identifying them when they are flying. The photo below, also shows that their preference is to lay eggs into waterlogged plants within bogs, moorland and acidic ponds.

A frequent question is how long dragonflies live. The answer is that they spend the vast majority of their life in water as larvae, and anything from a few seconds to a few weeks on

the wing. The Common Hawker spends longer (up to four years) as a larva than other species and so is more vulnerable to habitats drying out.



2025 Common Hawker Sightings VC66

Emerald Damselfly (Lestes sponsa)

Easily identified when in its adult state due to the bright iridescent emerald colouring of its upper thorax, and as you can see in the photo, the female has brown eyes and is dark green from S3 onwards.

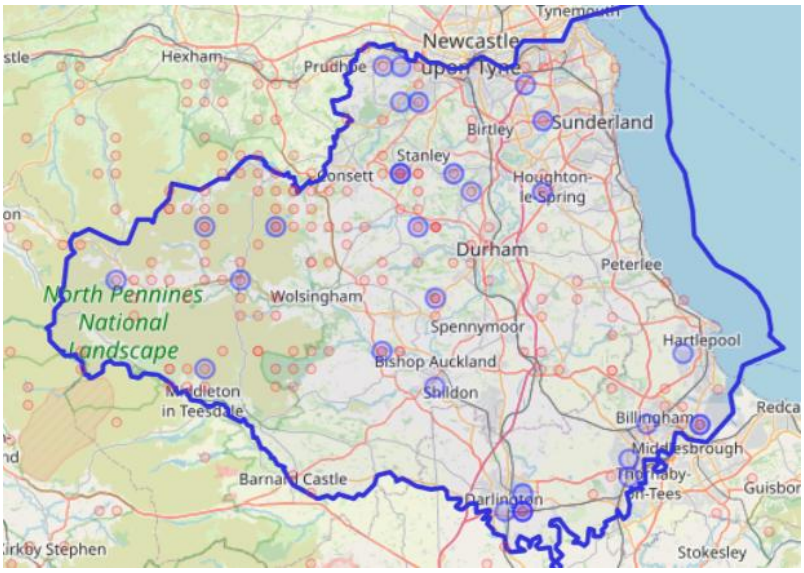
Photo Michael Coates

The male is a far darker emerald, with blue eyes and blue pruinescence on both ends of the abdomen (segments 1, 2, 9, and 10) as it matures. The wing spots are dark.

All of this is important to note because until 2024, if you saw an emerald-coloured damselfly in VC66 it would have been Lestes Sponsa. However, in 2025, multiple sites in the region had Willow Emerald Damselflies, so look more carefully from now on.

NB: The Willow Emerald is much longer, and has light wing spots, **no blue pruinescence** and the male's appendages are distinctly light with dark tips.

There were 78 sightings of Lestes sponsa between 24th April (very early) and 28th September. They are typically widespread around the region; (33 locations). They were most frequently spotted at RSPB Salthome, Maidendale NR and at Gibside National Trust. Nationally, they are in decline, and a status of "Near Threatened" is likely to be applied soon. This is, in part, as they prefer shallow water bodies with dense emergent vegetation and the drier climate is making such locations more variable. Also, because they tend to emerge later than other species (though not in VC66 in 2025), if the Spring weather dries out the ponds, emergence is affected.



2025 Emerald Damselfly Sightings VC66

Emperor (Anax imperator)

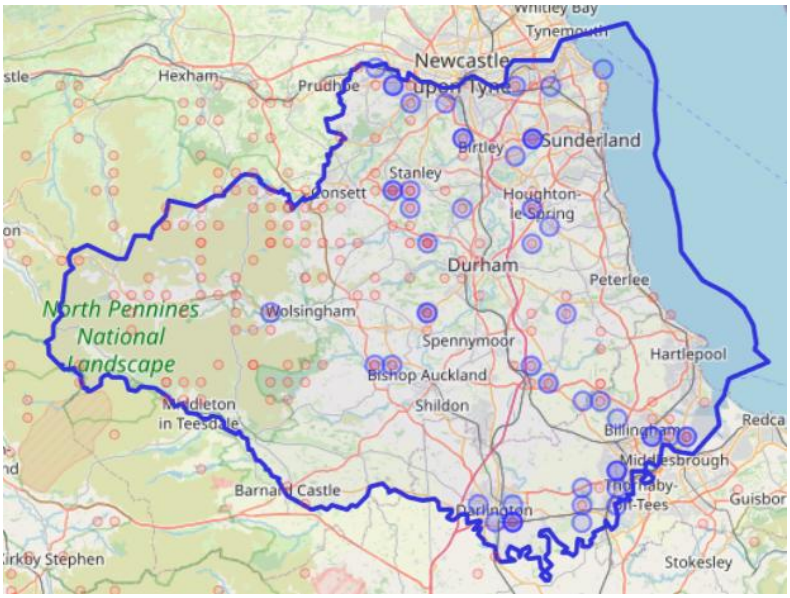
It is easy to identify, even when emerging as seen in this great photo by Enid Hoseason, as both sexes have an apple-green thorax without any noticeable black markings.

Emperors are becoming more common in VC66 and are frequently spotted patrolling up and down small ponds, making them very easy to spot.

There were 107 sightings, at 45 locations between 23rd May (early) and 18th of September.

Maidendale Nature Reserve — 15 sightings, Oakenshaw Nature Reserve — 11 sightings, Barmston Nature Reserve, Washington — 9 sightings *(Greencroft NR, Anfield Plain also has 9, so it ties for 3rd)*

Their increased frequency mirrors national trends, with Emperors being far more common in Scotland than was usually the case.



2025 Emperor Dragonfly Sightings VC66

Four Spotted Chaser (Libellula quadrimaculata)

Photo: Michael Coates

Four Spotted Chasers are very striking due to their wing colouration near their thorax and, of course, the distinctive four spots. They are quite aggressive and territorial, so expect some action if you see more than one.

The male and female are difficult to differentiate. The female, particularly when immature, has more gold on its thorax and upper abdomen than the darker males; however, primarily, you need to see (and ideally photograph) the anal appendages from different angles and, from a side view, look for secondary genitalia.

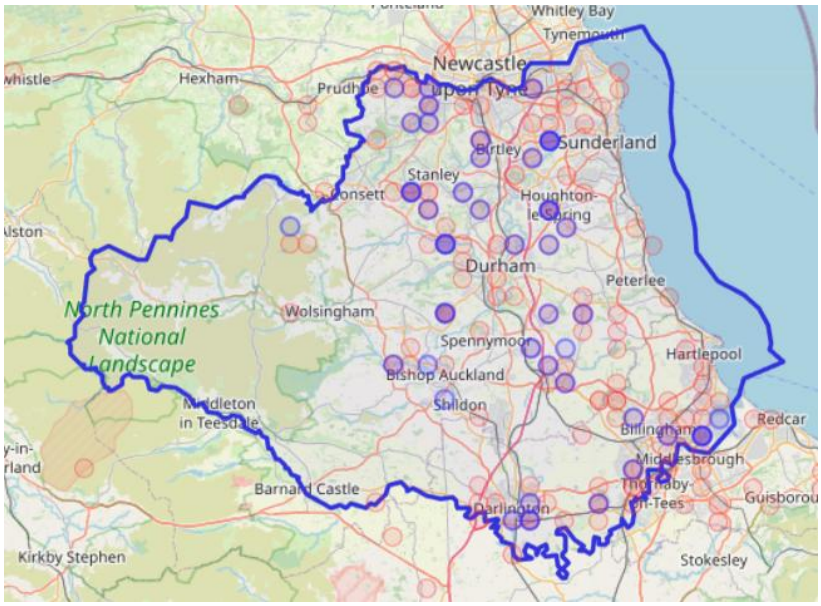
Male

Male

Female

Female

There has been anecdotal evidence of mass swarms in Europe going back to the Middle Ages. A more recent study (*Dragonfly Behavior*, Springer, 2024) described Millions of L. quadrimaculata that were filmed performing coordinated, synchronised, downward mass flight. The behaviour resembled waterfalls, matching similar 2016 scientific observations. Individuals then blanketed bushes and vegetation to roost en masse. Sadly, we haven't had such an event here.



2025 Four Spotted Chaser Sightings VC66

They were spotted on 145 occasions between 26th April and 25th July, which is a far shorter season than the year before, and the national averages.

They were seen at 48 sites, particularly at Oakenshaw NR, Greencroft NR (15x), Washington Wetlands Centre (14x), and Langley Park Wetlands (12x).

Golden Ringed Dragonfly (Cordulegaster boltonii)

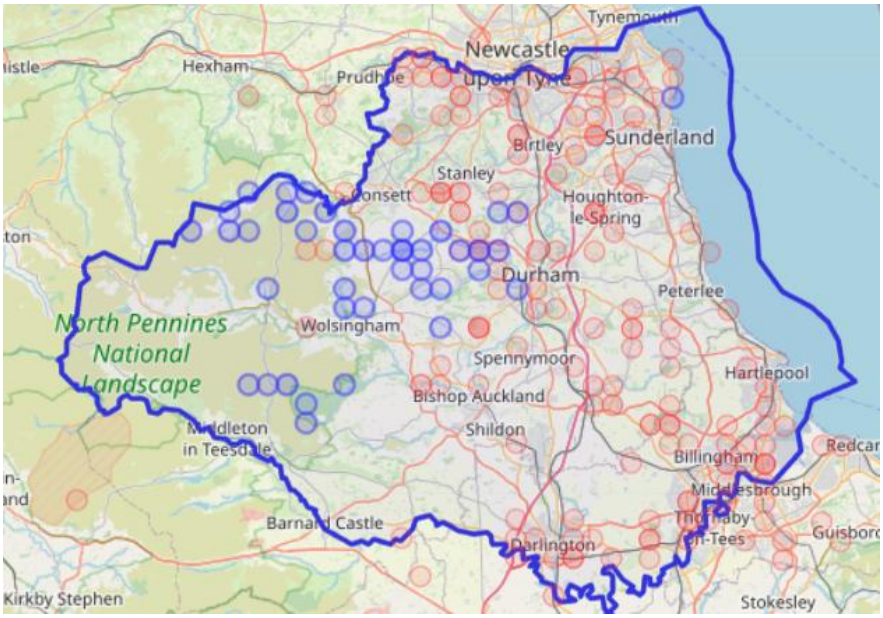
The Golden-Ringed Dragonfly is one of the largest dragonflies in Europe, with a wingspan ranging from 8 to 10 centimetres and a body length of up to 8.5cm. The adult dragonflies have a striking appearance, featuring a black body with bright yellow rings around their abdomen. This colouration gives them their distinctive name.

The best place to observe them in VC66 is Black Plantation, a DWT reserve. Head to the bench in the centre of the reserve in July and August, and as can be seen from Keith Walton's great photo, they will be close at hand.

They were seen on 94 occasions between 13th June and 6th September, at 60 locations, with Black Plantation (10x), Malton Ponds (6x) and Sharnberry Gill, Teesdale (4X) having the most.

The females, when viewed from any angle, have a very long and distinctive Ovipositor that looks like a dagger or a spike, hence Americans call this species a Spiketail. Below, you see S9/10 for a male on the left and a female on the right.

They are commonly found near acidic upland rivers, clean moorland streams and gravel-bottomed peatland channels. These habitats are increasingly under pressure from climate-driven hydrological change (erratic rainfall, warming) and upland land-use changes such as drainage and peat cutting. This makes the species a bioindicator of high-quality upland freshwater. As shown in the map below, such habitats are mainly in the western part of our region.



2025 Golden Ringed Dragonfly Sightings VC66

Larval development can last **more than 5 years** in colder, nutrient-poor waters. This is the longest larval stage of any UK Odonata, with Southern and Common Hawkers living 2-3 years underwater.

Large Red Damselfly (Pyrrhosoma nymphula)

Photo: Michael Coates

While pipped to the post by a Blue-tailed Damselfly, the Large Red is normally the first species to emerge in VC66, as before the winter, they grow to a stage that damselflies would normally reach in spring, and then they go into diapause over winter, thereby giving them a head start in the spring.

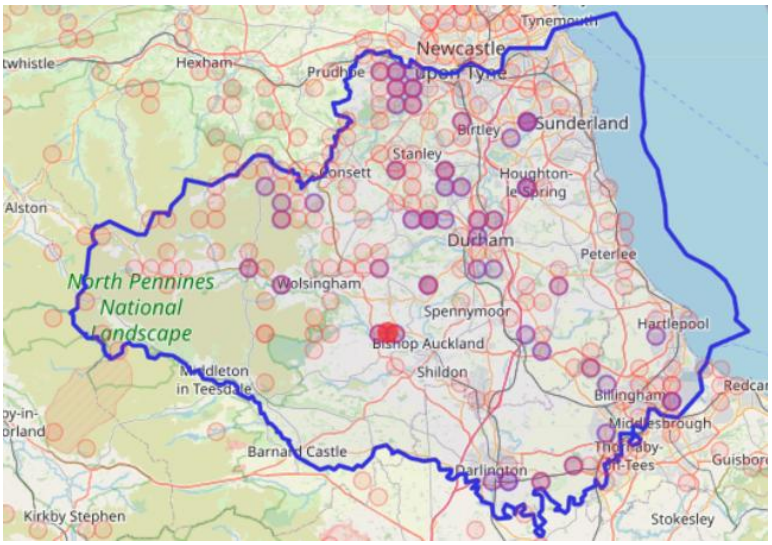
The photo by Tom Guy shows the first one seen on April 20th.

A key diagnostic feature is their black legs, which separate them from the much rarer Small Red Damselfly (which has orange legs).

Female Large Reds are unusually variable, occurring in three distinct forms ranging from mostly red to mostly black (typica, fulvipes, melanotum). The photo shows a typica female.

No sightings in 2025 provided photos of the other two colourations, so look out for them in 2026. They are very distinctive. The female melanotum is black from the top of the thorax down to S10, while the fulvipes is solid black S7-10 but virtually none on other sections.

Large Red Damselflies were common around the region and were seen on 188 occasions between 20th April and 17th August, which was a far shorter season, probably because the spring was so dry.



2025 Large Red Damselfly Sightings VC66

Lesser Emperor (Anax parthenope)

Had there not been a photo, this would have been rejected as we rarely get a Lesser Emperor in VC66. This specimen was spotted by Michael Jones at the Washington Wildfowl Trust (Amphibian Pond).

It clearly shows the light blue “saddle” that makes them so distinctive. As it was the only one spotted, it is most likely a vagrant blown in from the south or the continent.

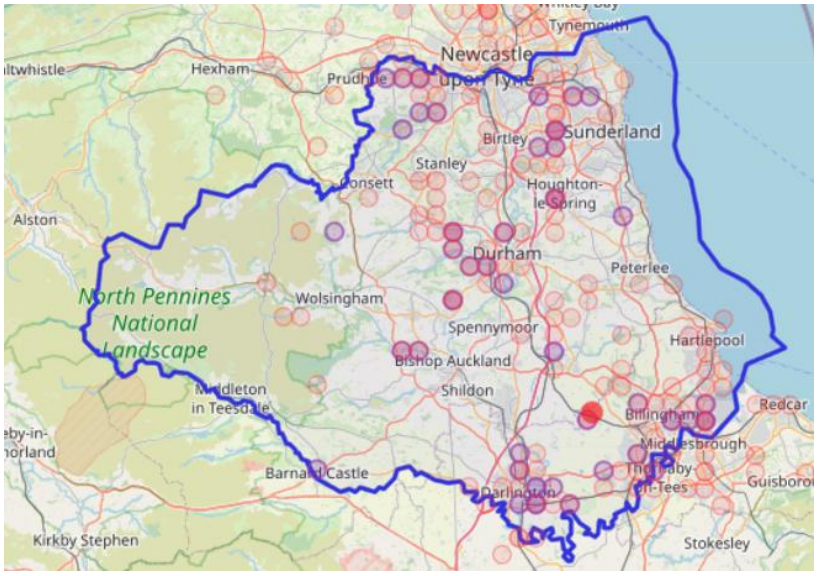
Migrant Hawker (Aeshna Mixta)

Photo Carol Inskipp

Often called the Autumn Hawker, they were traditionally found further south than VC66; as they prefer warm environments, however, they are now common and widespread across much of England and Wales. Fortunately for identification purposes, they are often around later in the season when other species have gone, and they love to hang on bushes, allowing close viewing, as can be seen in this photo (Michael Coates).

The photo is of a male, so as a reminder:

- **Male:** dark abdomen with blue spots and yellow flecks
- **Female:** brown abdomen with yellow spots
- **Diagnostic mark**: A bright yellow “golf-tee” marking on segment S2 — the clearest ID characteristic
- **Costa** (leading wing vein): brown (important for separating from Common Hawker)



Migrant Hawkers were seen on 141 occasions between 30th July and 22nd October.

They were seen in good numbers at Maidendale NR (18x), RSPB Salthome (9x) and Rainton Meadows (9x)

Because 2025 sightings matched those in earlier years, the 2025 sightings are the darker ones.

2025 Migrant Hawker Sightings VC66

Norfolk Hawker (Aeshna isosceles)

Another sighting that would have been rejected without a photo, but fortunately, Doreen Hart got a great shot at RSPB Salthome on 10th July.

Despite a concerted effort over the following days, no one else spotted it, which was a repeat of the Southern Migrant Hawker episode at Salthome a few years ago.

It is likely that Salthome's location next to the coast, its excellent habitat, high footfall, and ease of viewing are why rare species are spotted there.

The brown body and solid green eyes make the Norfolk Hawker easy to identify. Their normal range is the Norfolk Broads (hence their name), southern England, and scattered sites in the Midlands and South Wales.

Ruddy Darter (Sympetrum sanguineum)

Photo Michael Coates

Occasionally confused with male Common Darters, observers are getting better at spotting this striking species. The key differentiators are evident in this photo. Ruddy Darter males are a deep red, with solid black legs (no white stripe) and have a nipped “waist”.

The distinctive shape of the males’ abdomen and the black legs are important to look out for, as immature males have the same colouration as mature females. As the only females photographed in 2025 are shown here, it would be great to see more next year.

No distinct dark panel on the side of the thorax as seen in the Common Darter

The female, has the distinctive black legs, and a black line from the hind legs to the base of the hindwing.

In 2022, they were observed at only 16 locations on 32 occasions, making them relatively rare. The best place to look is Maidendale NR, and RSPB Salthome, although historically, Rainton Meadows has also been a stronghold.

2025 Sightings Ruddy Darter VC66

Small Red Eyed Damselfly (Erythromma viridulum)

The big story of 2024 was the dramatic spread of Small Red Eyed Damselflies not only across VC66 but into VC67. This has continued in 2025, albeit they were the least observed resident Odonata, which is not surprising for year two. *Photo Malcolm Short*

Their stronghold is Brasside Pond near Durham, where hundreds were observed.

Unlike the other blue damselflies, which are often seen away from water, Small Red Eyed Damselflies are typically on vegetation, floating on water, and so are more difficult to photograph.

Even though hundreds were observed at Brasside, they were all 20 meters or more away from the shore. They are a little easier to see at Ropner Park in Stockton-on-Tees.

Photo: Tim Burton (Snipe Pond)

If you have not seen one yet, the key is to look for the distinctive red eyes in the males. Females do not have red eyes, nor do they have a blue or coloured ring on s8-10. Once mature, they have a much broader black shoulder stripe than any of the colourations of the female Blue-tailed. Fortunately, as with most Odonata, where there is a female, there is likely to be a male. Spotters should first look for the male, then photograph any likely female, and consult the guidebooks.

They were observed on 30 occasions at 13 locations between 18th June and 9th September.

Southern Hawker (Aeshna cyanea)

Photo Tim Burton

Despite their name, Southern Hawkers are frequently observed in VC66. Both sexes can be identified by coloured bands across S9 and 10, (as opposed to paired spots). The most distinctive feature is the broad stripes on the top and sides of the thorax.

From a behavioural stance, they often fly up to you and appear to be checking you out. Often found well away from water, mature males are highly territorial and will see off any competitors.

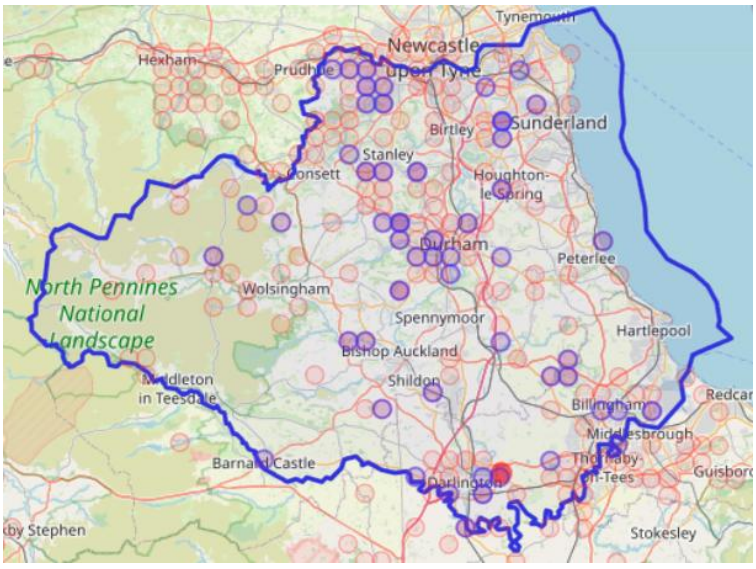
In the photo, you see the classic wheel shape when mating. The male holds the female firmly using his anal appendages, having identified her by sight and then ensured she is the correct species as the shape and size of the female's neck/thorax area and the male's claspers are species-matched.

However, as can be seen in Keith Walton's photo below, this does not always work. Here we have a male Migrant Hawker in tandem with a female Southern Hawker.

Nature prevents successful mating through mechanical isolation, which includes the clasping of the neck, but also the male's secondary genitalia on S2-3 must connect with the female's genital opening near the end of her abdomen. Their body length, abdominal curve and genital structure help prevent mating.

While in most instances the "wrong" female breaks the connection, the final failsafe is Gametic isolation, where the sperm and egg are incompatible.

They were the fourth most common dragonfly (as opposed to damselfly) in VC66, down from second last year and often first. They were observed 133 times across 43 sites. They were most frequently seen at Langley Park Wetlands, Gibside National Trust, and Twizell Woods.



2025 Southern Hawker Sightings VC66

Willow Emerald Damselfly (Chalcolestes viridis)

Photo Ivonne Bambrough WWT Washington

Willow Emeralds were spotted at Rainton Meadows (Joe's Pond), Washington Wildfowl Reserve, Maidendale NR, Brankin Moor NR, Greencroft NR, Barmston Nature Reserve (Washington) and Red Hall NR, plus just outside our region at Gosforth Nature Reserve. This comes just two years after they were only seen at Rainton Meadows.

While every submitted photo of an Emerald Damselfly was checked to see if it was actually a Willow Emerald, it is possible that spotters did not submit sightings as they thought it was the more common species.

The key to identifying them is that the male has very pale, almost white anal appendages with tiny dark interior appendages. There is a very pale marking on the tip of its wings. Even though the depth of field put them out of focus, you can clearly see the white appendages and pale wing spots in the next photo.

Photo: Michael Coates

They lack the powder blue pruinescence that can be seen on the male Emerald Damselfly, and also, if you look at their thorax from the side, there is an irregular spur.

Photo Michael Coates

Discussion Points

In recent years, the number of spotters using the DWT app has declined, putting a greater reliance on iRecord and iNaturalist. That is not a problem in itself, except that recording multiple sightings of different species on iRecord is time-consuming and might put people off. Also, they need to be exact with the map reference, whereas on the DWT app, it's built in. Lastly, while it is great that so many people are recording Odontata via iRecord, they are often unknown to the county recorder, which makes assessing rare species more difficult, and they miss out on networking opportunities. So in 2026, the author will try to network more.

For those who still prefer the DWT app for submitting sightings (don't worry, they all end up on iRecord), here is the 2026 link. https://survey.protostarsurveys.com/zs/Qwtn9I

The challenge for 2026 is to see how widespread the Willow Emerald is, not just seen but successfully breeding, so ideally, we need evidence of emergence, or at least the telltale scars on branches.

Geographically, we still don't get many sightings from the west of the region, so please plan a few trips out to the moors and reservoirs to the west.

Acknowledgements

The author would like to thank all those who submitted sightings, and in particular, Keith Walton, Joe Finlay, Ian and Elaine Burnell, Christopher Bill, David Howdon, Tom Guy, John Humble, Malcolm Short, Julie Hogg, Mal Wilkinson, Carol Spencer, Carol Inskipp, Helen Jeffries, Vivien Kent, Tim Burton, Jordan Philip and Mark Newsome. Otherwise, my thanks go to all the many people who submitted records and some great photos, apologies if your name has not been mentioned.

Lastly, thanks also go to the DWT volunteers and staff who maintain the reserves and create new habitats for these iconic creatures.