Bittern Countryside

Community Interest Company

An Atlas and Guide to the Dragonflies and Damselflies of the Arnside & Silverdale AONB

Supporting the **Arnside & Silverdale Area of Outstanding Natural Beauty**

Bittern Countryside Community Interest Company
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Damselflies and Dragonflies of the Arnside & Silverdale AONB

by Ian Brodie, February 2022

In a number of ways the AONB is an exciting place for damsel and dragon flies due to its location. For a limestone area the relatively good number of water features - ponds, meres, mosses and dykes means we can find 5 species of damsels (Zygoptera) and 12 species of dragons (Anisoptera) with others likely to be found here in the coming years. Two more species are already on the fringe of the AONB. Whilst this is a poor total compared with the south of England it reflects the shortage of some habitats and if we look back to the end of the twentieth century, we would have found many fewer species here. If we attribute change to global warming then the position of the AONB on the edge of the narrow coastal strip between the sea and the Pennines (the Forest of Bowland offshoot) then the AONB becomes a strategic area for species about to colonise northwards into Cumbria and Scotland.

The damsels are usually smaller than dragons and mostly rest with wings folded along their abdomen, having their eyes towards the edge of their heads. Dragons, mostly larger species, keep their wings at right-angles to the body when resting and their eyes virtually meet together. This successful type of insect, whose forebears can be traced back many millions of years are colourful and enjoyable to watch. Whilst they live most of their lives under water their periods of emergence are when they are widely noted. The colours of adults can vary over their life-span and some may change in hot weather.

In the AONB the best sites to see these insects are around Hawes Water, Leighton Moss and Trowbarrow, and Hale Moss with the adjacent fishing ponds. The Lancaster Canal, River Bela, River Keer corridor, and Heysham ponds provide major sites adjacent to our area. Some of these sites, on private land, may have access restrictions. Newly emerged individuals, especially maturing females, are just as likely to be found away from water as besides the water-bodies of the AONB.

Please report sightings of any species to Brian Hancock at brian@yealand.demon.uk or Ian Brodie at iob@btinternet.com with a photograph if possible. Let us know if you want help with identification. We can probably expect to see further additions to our dragonfly fauna over the coming decade especially if temperatures continue to rise, indeed it appears strange that some species, including those occurring during larger-scale immigrations, have not been seen or recorded here already. The Banded Demoiselle is a case in point.

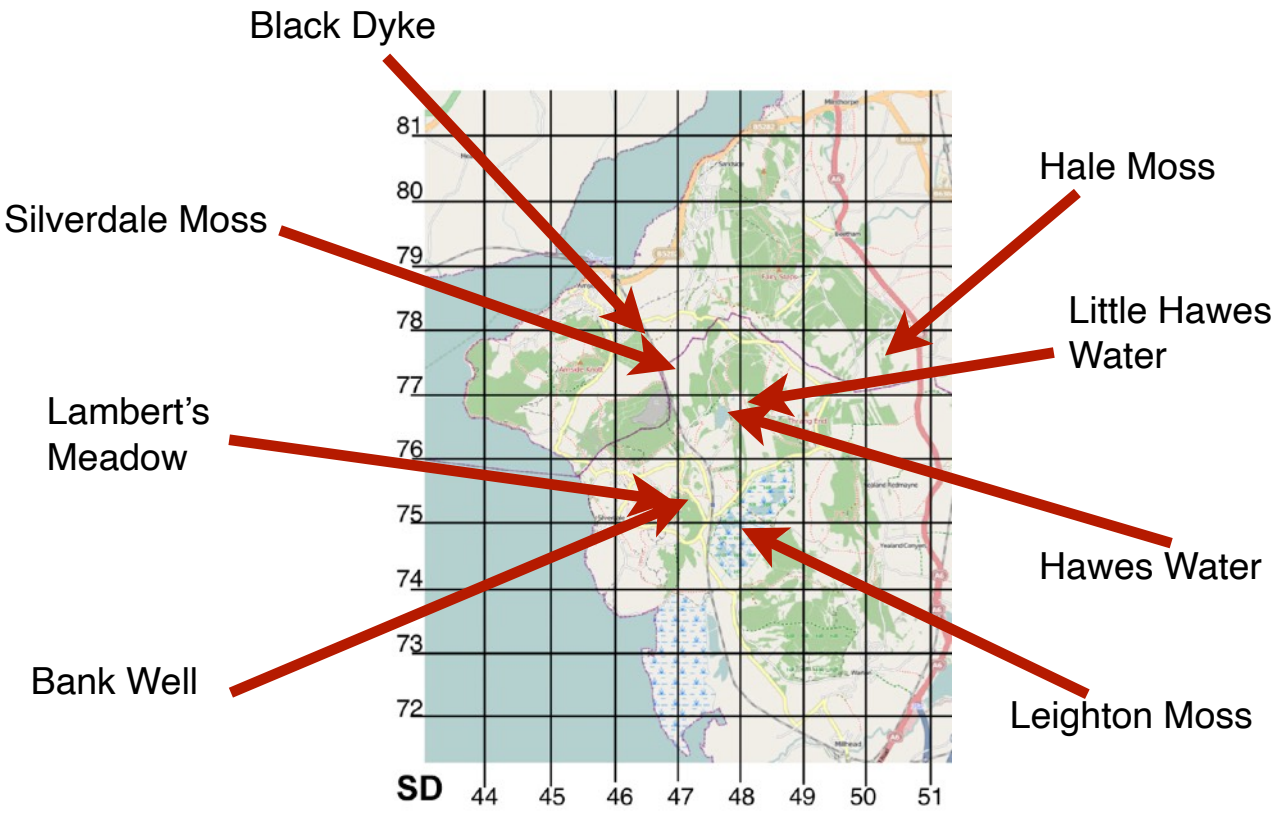
Habitat photos on back page are by Ann Kitchen. All other photos are by Ian Brodie unless otherwise stated.
Edited by Ann Kitchen.

All profits from this publication will go towards recording and conserving the flora and fauna of the AONB.

Demoiselles and Damselflies

Hawkers and Golden-ringed

Chasers, Skimmers and Darters



Two books are recommended if you want to identify dragonflies, *Field Guide to Dragonflies and Damselflies of Great Britain and Ireland* by Steve Brooks and Richard Lewington; and *Britain's Dragonflies* by Dave Smallshire and Andy Swish.

There are two web sites worth consulting: lakelandwildlife.co.uk (for Cumbria) and british-dragonflies.org.uk. In 2013 the latter organisation will be publishing a national atlas of dragonflies in Great Britain. This up-to-date work will also show details of the species and habitats.

Our maps show where the dragons have been sighted in the AONB. In many cases proof of breeding has also been shown in these areas. Proof of breeding is usually confirmed by finding larval cases (called exuviae) from newly emerged damsel and dragonflies.

Equally, finding the larvae in the water shows that breeding has taken place at that site. Sometimes observing egg-laying demonstrates that breeding has been attempted and is usually successful. Different species lay eggs (oviposit) in a variety of ways - for example, sometimes they remain paired, whilst in other species the female lays independently of the male.

Southern Hawker emerging from larval case

Photo Eddie Simpson

Damselfly larva

Photo Eddie Simpson

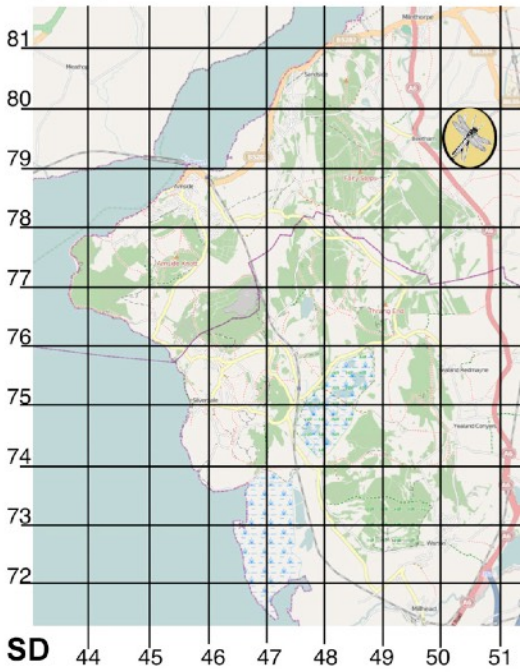
The larvae can emerge the following year in some species but, with other species, this can be two or more years.

Banded Demoiselle - *Calopterix splendens*

Abdomen: 33-40 mm. Hind wing: 27-36 mm. Emergence: May to September.

This large damsel fly has not yet been recorded in the AONB but is believed to breed on the River Bela, the River Keer and the Lancaster Canal, one site being within a kilometre of the boundary along the A6. So look for it around Milnthorpe and let us know if you see it. This species can be on the wing from late-May to early August.

The wing pattern of the male, especially in flight, is engaging but the female has more even coloured wings and can sometimes be confused with its relative, the Beautiful Demoiselle, a species found not too far north of the AONB.



Female

Male

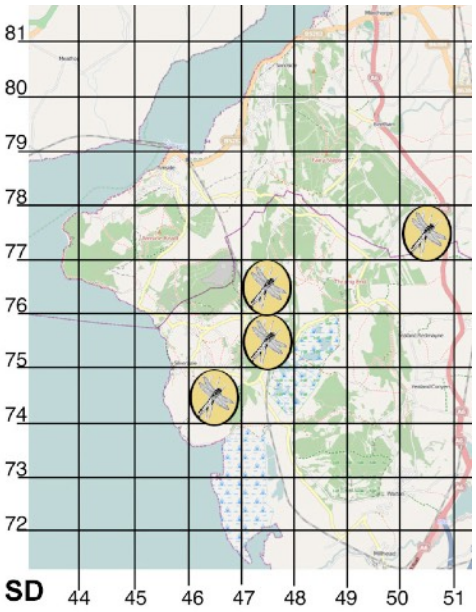
Emerald Damselfly - *Lestes sponsa*

Abdomen: 25-33 mm. Hind wing: 19-24 mm. Emergence: July to early October.

The last of the damsels to emerge each summer it is notable for its green colour and the fact it perches with its wings not fully folded (the American name of spreadwing encapsulates this).

Like the other four damsels this is widely distributed through the AONB and might be seen at garden ponds.

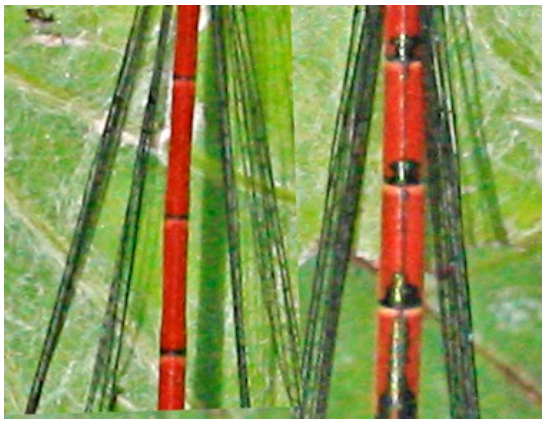
Bank Well is a good site for this species in mid-summer, usually seen from July to early October.



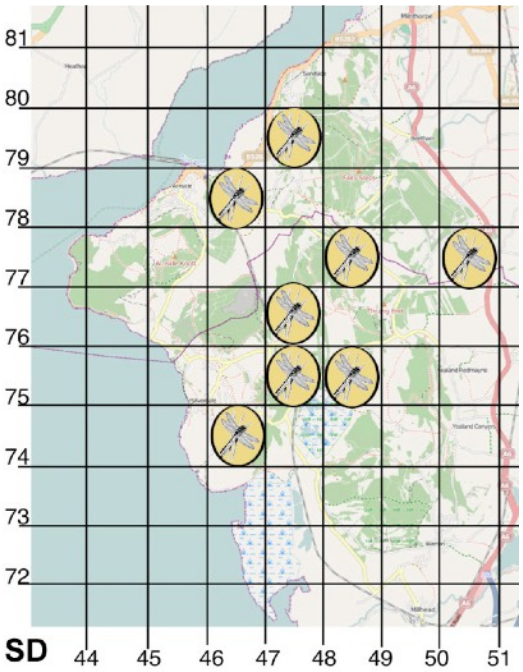
Large Red Damselfly - *Pyrrhosoma nymphula*

Abdomen: 25-29 mm. Hind wing: 19-24 mm. Emergence: late April to August.

This is the first species to emerge in the spring and is unmistakable from its colour. We have no records of the related Small Red Damselfly (which, besides being small, has red legs). It is often found on small streams but also occupies ponds. It is present at most sites, especially near flowing water and at the Hawes Water board walk.
It has been found in garden ponds in Arnside.



The male, on the left, has a much narrower abdomen with narrow black stripes. The female, on the right, is much stouter with thick black stripes.

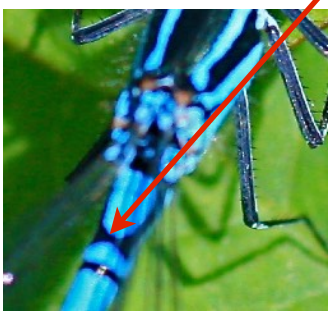


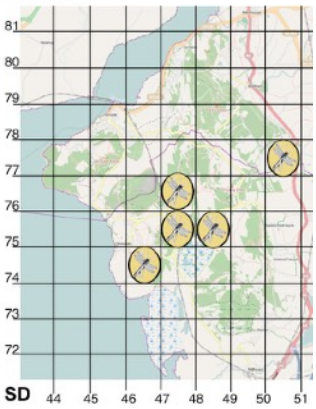
Azure Damselfly - *Coenagrion puella*

Abdomen: 23-30 mm. Hind wing: 16-23 mm. Emergence: June to mid August.

Common throughout the AONB and very like the next species. Look for the glass tumbler black marking towards the top of the abdomen. The female is differently marked and, when mature, green.

glass tumbler

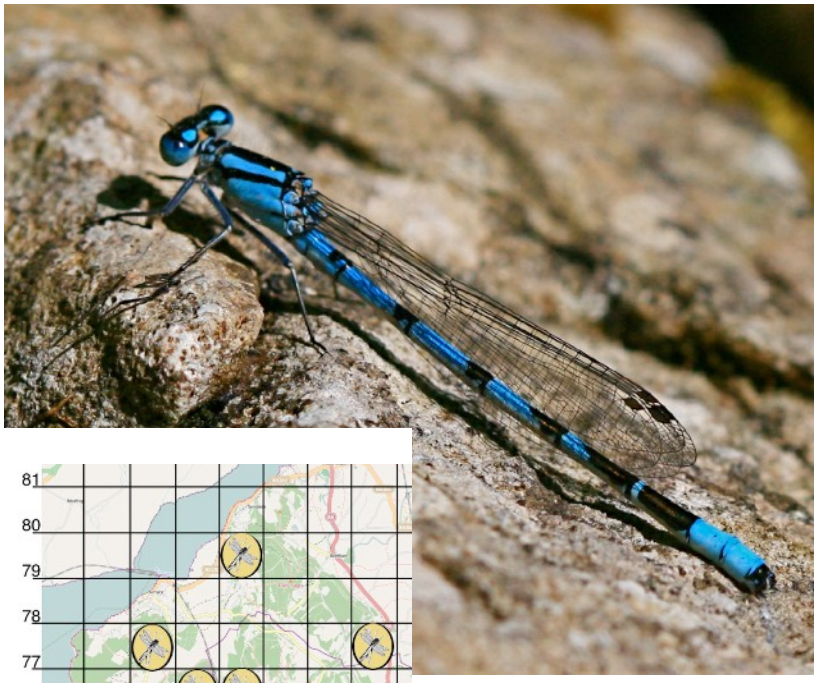




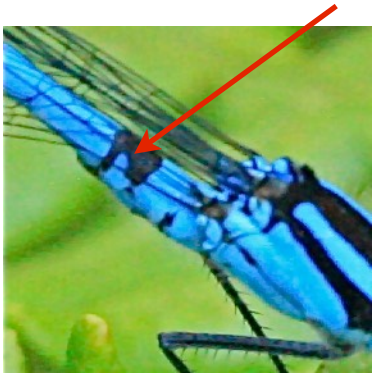
Common Blue Damselfly - *Enallagma cyathigerum*

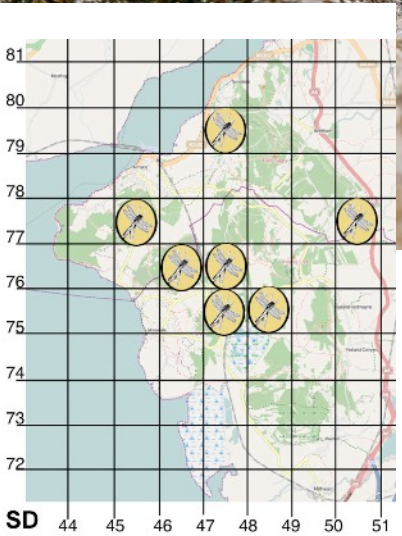
Abdomen: 24-28 mm. Hind wing: 18-21 mm. Emergence June to October.

Again ubiquitous throughout and, for the beginner, can be difficult to tell from the previous species, the Azure Damselfly. Look for the ace of spades marking towards the top of the abdomen. The female is paler when mature than the male and somewhat differently marked. The blue and black markings towards the end of the abdomen are also diagnostic.



Ace of spades

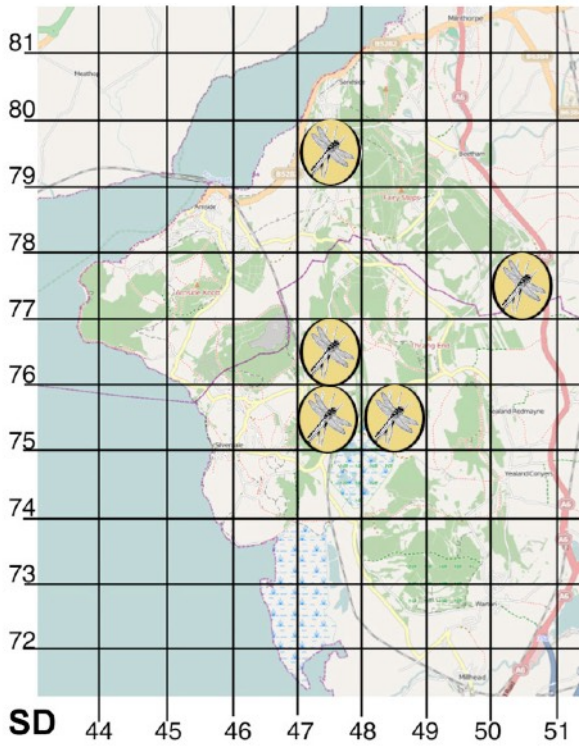




Blue-tailed Damselfly - *Ishnura elegans*

Abdomen: 22-29 mm. Hind wing: 14-20 mm. Emergence: mid June to September.

Our third and widespread blue/black male damselfly but the abdomen is mostly black with a distinctive blue band towards the end. Again the females vary in pattern from the male. Hale Moss is a good place for the three blue damsels as is Hawes Water board walk.



Common Hawker - *Aeshna juncea*

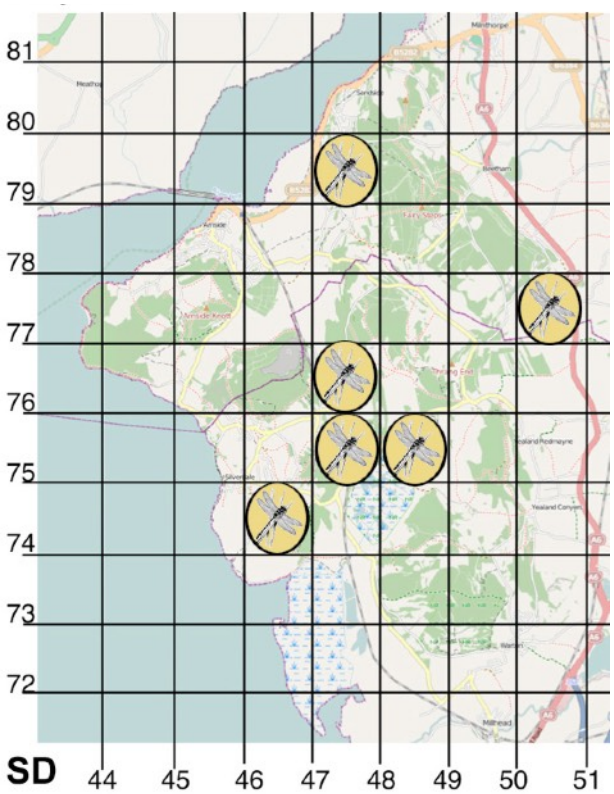
Abdomen: 50-59 mm. Hind wing: 40-48 mm. Emergence: July to September.

This is the longest established hawker dragonfly in the AONB. The others are more recent arrivals. Despite this, it is recorded less frequently than the Southern Hawker. A mid-summer species with the male being blue and black and the female brown and yellow.

Male

Look for the two narrow yellow stripes on the thorax, just behind the head in the resting male. The larval development takes about two-years and flight starts late June through to September or even October in a good weather year.

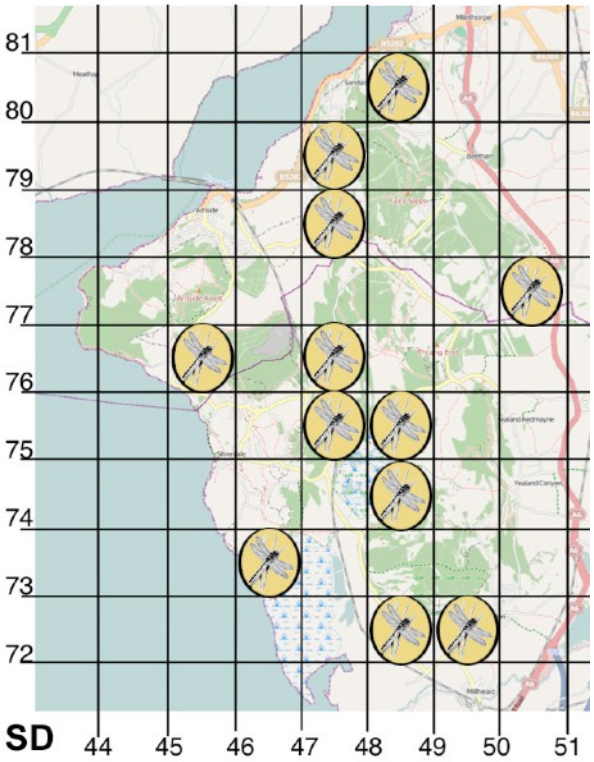
Female



Migrant Hawker - *Aeshna mixta*

Abdomen: 43-49 mm. Hind wing: 37-40 mm. Emergence: late July to late October.

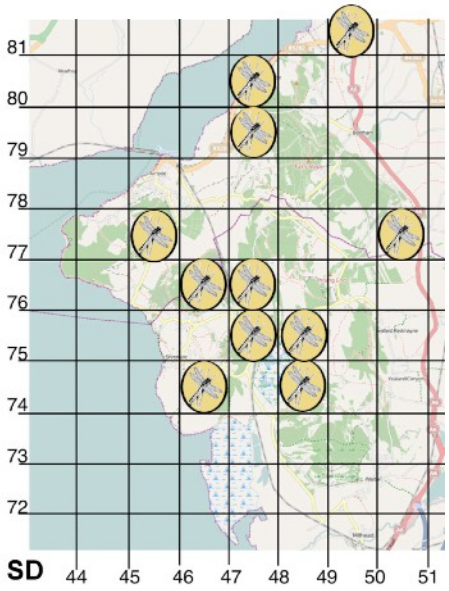
A recent arrival in the AONB that has colonised well. Smaller than the other species of hawker it can often be found hunting along a woodland edge such as on Gait Barrows and Trowbarrow.



Southern Hawker - *Aeshna cyanea*

Abdomen: 51-60 mm. Hind wing: 43-51 mm. Emergence: late June to October.

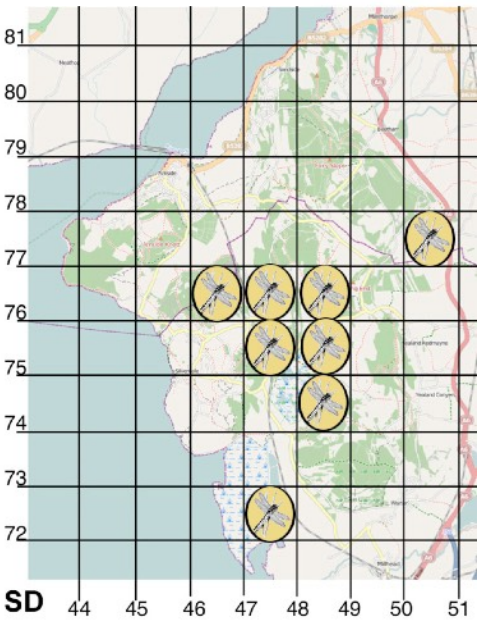
The greenish coloured sections on the abdomen, the two strong yellow stripes on the thorax and the inquisitive nature of this hawker help distinguish it from the other family members. Often found in garden ponds. The causeway at Leighton Moss is a good place in late summer. A relatively recent arrival in the AONB.



Brown Hawker - *Aeshna grandis*

Abdomen: 49-60 mm. Hind wing: 45-49 mm. Emergence: late June to October.

There is little mistake to be made with this large, active brown hawker. Another relatively recent arrival in the AONB and readily seen from Hawes Water boardwalk.

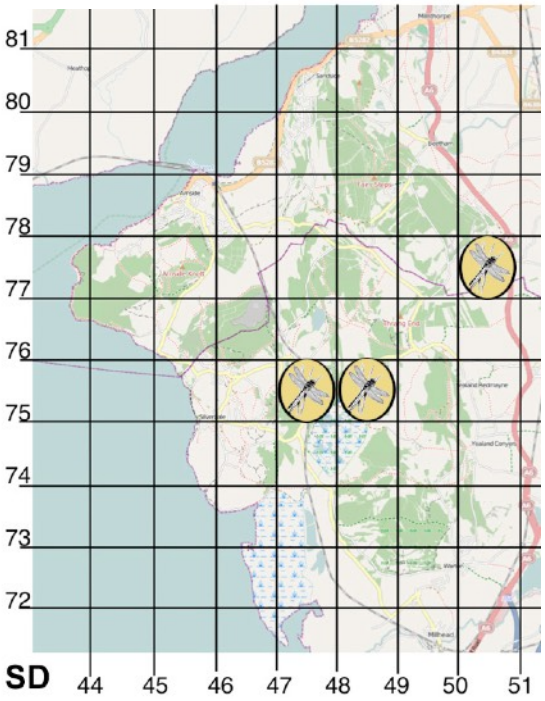


Emperor Dragonfly - *Anax imperator*

Abdomen: 49-61 mm. Hind wing: 45-51 mm. Emergence: late May to September.

It is arguable whether this or the Golden-ring Dragonfly is the largest in England, but the unmistakeable flying of the large bright blue male, with its convex shaped body, incessantly hunting over larger areas of open water is a delight to watch. The female is green and less seen as she feeds up away from water prior to mating and egg-laying (ovipositing). Hale Moss has held this species for a number of years. Like many dragonflies the larval stage can take at least two years.

Female



Dragonflies are both hunters and prey. They are a vital part of the food chain.

The female (above) is eating a Common Darter while the immature male (to the right) has fallen prey to a raft spider. The blue colouration gradually spreads down the abdomen as the dragonfly matures.

Immature Male

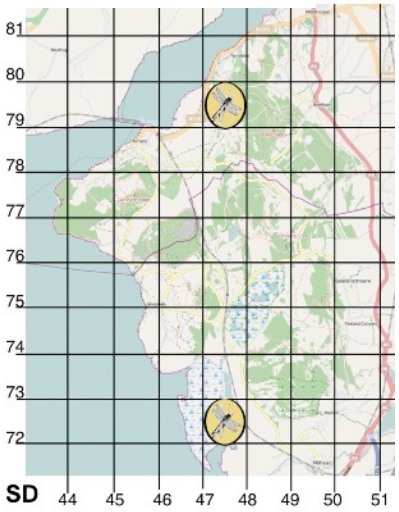
Photo David Talbot

Golden-ringed Dragonfly - *Cordulegaster boltonii*

Abdomen: 54-64 mm. Hind wing: 41-47 mm. Emergence: June to August.

This species usually prefers streams with stony bottoms and its larvae can take up to five years before they emerge especially from upland streams. There have been occasional reports of this easily recognised black and yellow banded species which, along with the Emperor, passes for the largest dragonfly in Britain. To find it in the AONB is not unexpected but there are few suitable sites for breeding in the area.

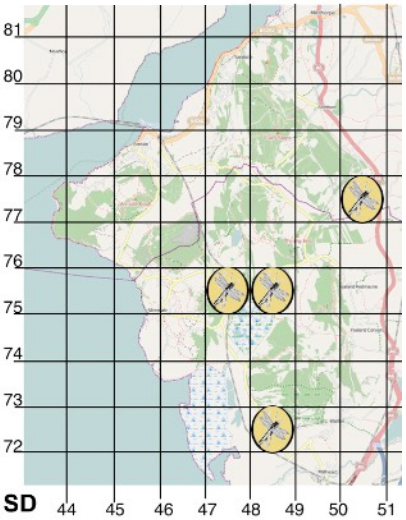
Those seen are likely to be on migration although it would be interesting to confirm whether or not it is a local breeding species. This summer species is usually on the wing between June and August.



Four-spot Chaser - *Libellula quadrimaculata*

Abdomen: 27-32 mm. Hind wing: 32-40 mm; Emergence: late April to August.

Often the first of the spring dragonflies to emerge, sometimes by late April. This large chaser is notable for its colour and the four dark patches (costa) on the leading edge of the wing, seen during the regular perching of this species. As the dragonfly matures the abdomen changes to dark brown with yellow sides. Hale Moss is a good site.

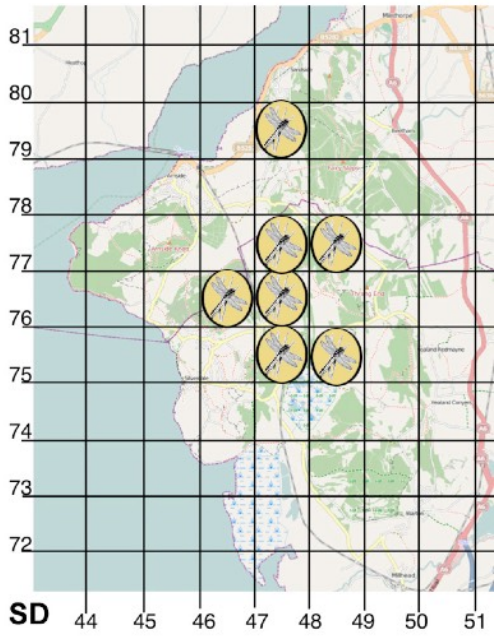


Broad-bodied Chaser - *Libellula depressa*

Abdomen: 22-28 mm. Hind wing: 33-37 mm. Emergence: late May to August.

A recent resident that has given rise to a great deal of interest in dragonflies in the AONB due to the colourful and, relatively, approachable male. Found throughout the AONB in garden ponds and at Bank Well.

Female



Male

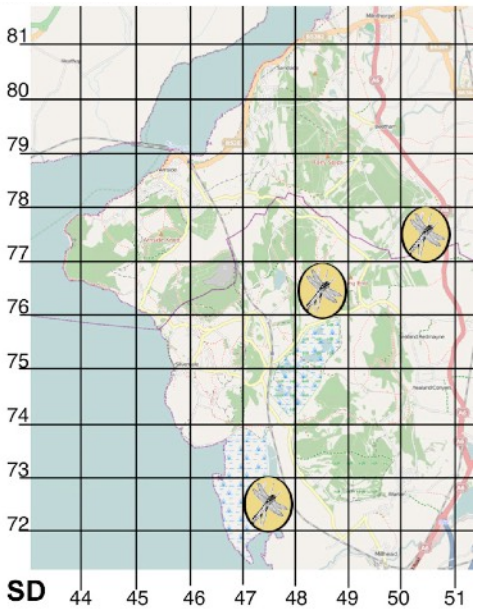
Photo Brian Hancock

Black-tailed Skimmer - *Orthetrum cancellatum*

Abdomen: 29-35 mm. Hind wing: 35-41 mm. Emergence: June to July.

A species on the move but with only three records within the AONB. It is also found on the Lancaster Canal just south of Burton. Perhaps its progress north has been slowed by recent wet winters. Prefers open water bodies with stony shores.

Female



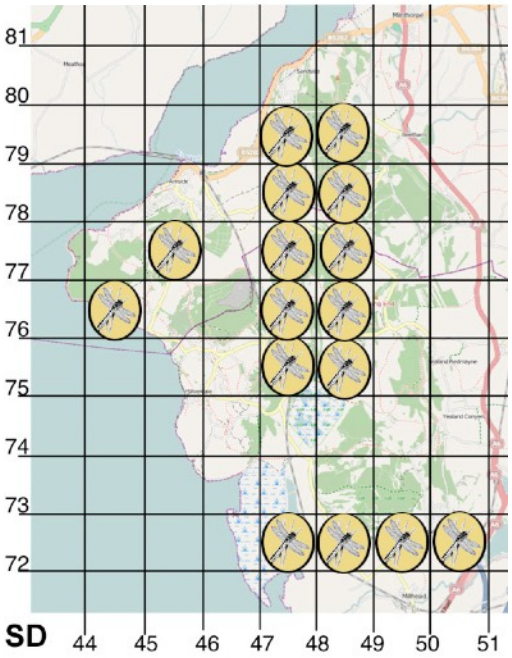
Male

Common Darter - *Sympetrum striolatum*

Abdomen: 25-30 mm. Hind wing: 25-30 mm. Emergence: early June to November.

A common resident of the AONB. The male is red and the female, yellow-brown. A ubiquitous species in the area.

Female



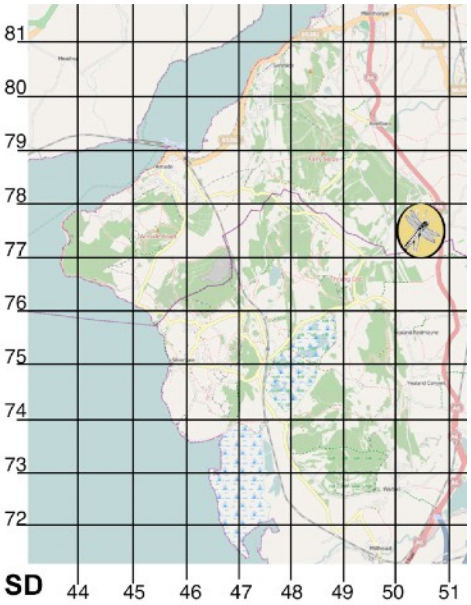
Mating pair

Black Darter - *Sympetrum danae*

Abdomen: 18-24 mm. Hind wing: 20-26 mm. Emergence: early July into September.

The smallest of our dragonflies, this late summer species can emerge in good numbers. The black male is very distinctive but the female is similar in colour to the Common and Ruddy darters where the black markings on the side of the abdomen need to be examined. So far it has only been reported on one site in the area.

Female



Male

Red-veined Darter - *Sympetrum fonscolombii*

Abdomen: 24-28 mm. Hind wing: 26-31 mm. Emergence: July and August.

Photo Eddie Simpson

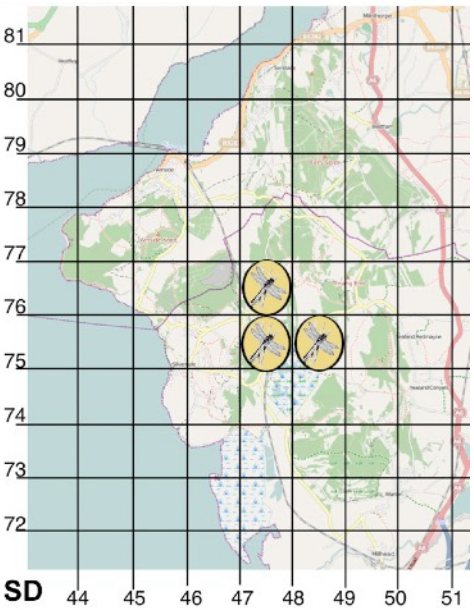
For Britain this is a regular immigrant from the continent but there are a few English breeding populations including one at Heysham. It can be found around ponds (but it also tolerates brackish pools and ditches). Its arrival in the AONB may, with luck, be expected in the future.

Ruddy Darter - *Sympetrum sanguineum*

Abdomen: 20-26 mm. Hind wing: 23-29 mm. Emergence: early July into September.

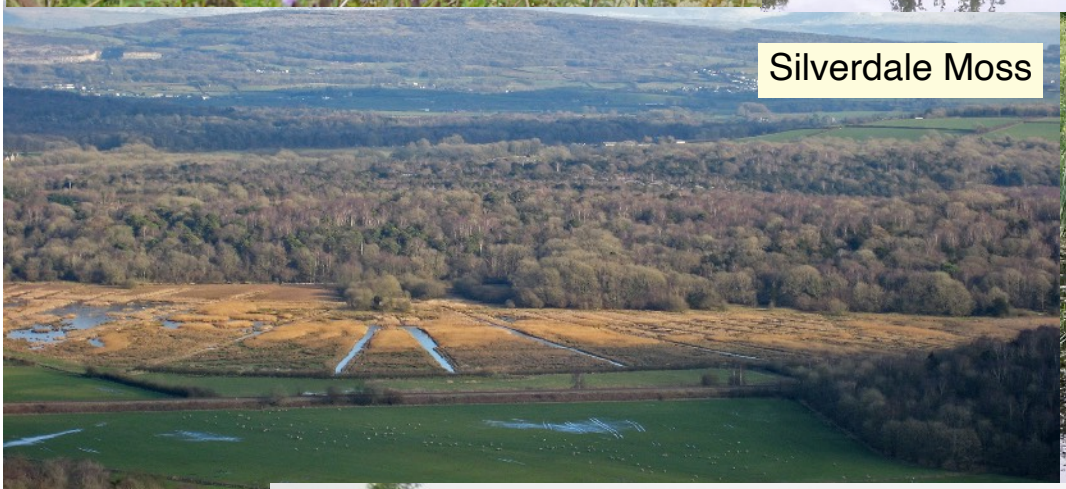
Only three records exist for this species, hopefully about to colonise the AONB. It is believed a breeding colony was known of in Silverdale. The only records are from Leighton Moss, Hawes Water and Bank Well. Very much like the Common Darter but with a distinct narrowing of the abdomen of the male.

Male




Black Dyke


Hale Moss


Silverdale Moss


Bank Well


Hawes Water


Leighton Moss