Eye D — Blue Hawkers

The Aeshnidae family are most definitely a challenge to our identification skills, particularly when first starting to look at dragonflies. In Sussex, we have four resident hawkers - Emperor, Southern, Migrant and Hairy. This article deals with the males, which are blue to a greater or lesser extent and can be readily categorised as "Blue Hawkers". The final section discusses two rare vagrants.

Now there is one intrinsic problem with large dragonflies: whereas damselflies perch, chasers perch, skimmers perch and darters perch, hawkers do not. Well, not usually. They are big, strong fliers and enjoy flying around frightening the life out of lesser beings. Similar identification problems exist in bird -watching: was that large Black bird in the distance a Carrion Crow, Rook or Jackdaw? Or with butterflies: was that white one a Large, Small, Green-veined or even a female Brimstone? If they don't land, the difficulties of identification are magnified. Sorting out the differences will thus be dealt with in 2 sections - flying and perching dragonflies.

Resident Species

Flying

To simplify matters, there is one species that is substantially different to the others: the Emperor-flying imperiously with sky blue abdomen, green thorax and yellow costa, as shown in the photo (right). Occasionally one can even see the black dorsal line running the length of the abdomen. Don't worry about the downcurved abdomen, because all the hawkers hold their abdomens in a roughly similar way.

One would think that observing a yellow nose, blue eyes, brown thorax with yellow stripes and dark abdomen with blue spots would be more than adequate detail to correctly identify one of the remaining three species, but unfortunately not, as all three satisfy this description. Study these features in the next two photos:







Southern Hawker ©David Chelmick

Migrant Hawker ©David Chelmick

Sussex Dragonfly Society Eye-D Guides

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They are remarkably similar. The Southern Hawker is larger, but size is only obvious if there is a larger or smaller specimen nearby. You might even be able to home in on the Southern Hawker's significant antehumeral stripe, but most likely not.

The remaining species is Hairy Dragonfly and in the absence of an in-flight picture, I have rotated a perched side view through 90 degrees. In theory the thorax is less brown and the stripes yellowishgreen than the other species, but chances are this would be difficult to pick up in flight. In order to differentiate between the four species we therefore need to look at a number of other factors:

Habitat/Appearance/Behaviour

Ditches, medium sized, singly weaving through reeds at low height = **Hairy**Woodland, large, normally singly, flying low, inquisitive, blue tip to abdomen = **Southern**Edge of woodland, medium sized, in numbers, non-aggressive, flying at height = **Migrant**

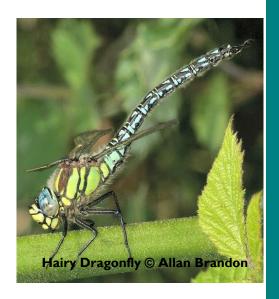
Main Flight Season:

Early (May/June) = **Hairy**; Mid-season (June/August) = **Emperor**; Later (July/September) = **Southern**; Late (August/October) = **Migrant**.

Important factors to note are:

Numbers - if you see several hawkers flying together, **nonaggressively**, hawking for insects, the likely conclusion is Migrant Hawkers, although several Southern Hawkers may occasionally occur together, they will be aggressive;

Time of year – each month will be a helpful indicator as to the dragonfly with Hairy being the earliest species and Migrant the latest.



Perching

After hours of holding territory, aerial combats and mating, there will come a time when the hawkers perch, usually vertically on a tree trunk or tall vegetation. You just need to make sure you are around when they do it. Afternoon is likely to be the best time. Most field guides point out that the Hairy has a long, thin pterostigma. However, all hawkers have brown pterostigmas and determining whether long/short or thick/thin would require netting and examination in the hand. This article assumes the observer is looking at the subject through a good pair of close-focusing binoculars.

Species	Antehumeral Stripes	Segment 2 Markings	Abdomen
Hairy Dragonfly	Medium, long, green	None	Neat, paired, pear-shaped, blue spots
Emperor	None	None	Black dorsal stripe
Southern Hawker	Broad, long, green	Yellowish-green triangle	Waisted, green paired spots, blue tip
Migrant Hawker	Short, thin, yellow	Yellow golf tee	Blue paired spots

Study the features outlined in the following table with the photos shown over the page:

Blue Hawkers Continued.....





Migrant Hawker

Southern Hawker



Hairy Dragonfly © Allan Brandon

Deciding whether the spots are light blue or dark blue, small or large will likely as not add to your confusion. Also, the mix of green and blue spots on the Southern Hawker may appear far less obvious when it is perched. Thus, we need to focus on one particular area of these insects, namely the thorax, Segment I (SI) and Segment 2 (S2), as shown below:







Migrant Hawker

Southern Hawker

Hairy Dragonfly

Refer back to the table you will note the differences between the antehumeral stripes and S2 markings of the three species. In addition, look at the colour of S1, immediately beneath the thorax:

Dark Brown = **Migrant Hawker**; Green = **Southern**; Black with central pale green spot = **Hairy**. S1 will be particularly relevant to assist in identifying a rarity.

Blue Hawkers Continued

Vagrants

Imagine, you have just seen the dragonflies below and have to write your field notes - yellow nose, blue eye, brown thorax with yellow stripes and dark abdomen with blue spots. Sounds familiar, doesn't it? At this point you need to bear in mind the rarity mentioned earlier, the Common Hawker.





Common Hawker ©David Chelmick

Common Hawker © Allan Brandon

This insect is wary and renowned as a tireless flier, so the chances are slim of being able to observe one perched. The solution, as suggested by David Chelmick, in the previous article on Emeralds, is to take out your digital camera and try to get an in-flight picture. It may not be as good as the ones above, but may be sufficient to show the yellow costa or even the thin yellow antehumeral stripes.

It is a mystery as to why this species should be called "Common", which has been the cause of much confusion, resulting in misidentification. It is a species of moorland, present in the west and north of the country. Such habitat is in short supply in our County. The most recently accepted record was 15 years ago at Iping. There has only ever been I breeding record in Sussex - on the Hampshire border at Liphook. Thus, if you are to have any chance of finding this dragonfly, you will need to visit the heathland areas. Those in the north-west, in the vicinity of Thursley will be the best bet.

The photo below shows a perched male. Note the long, thin, yellow antehumeral stripes, sharply waisted abdomen (slightly more so than Southern Hawker) and lack of any yellow markings (golf tee or triangle) on S2. Look more closely at the antehumeral stripes in the magnified view and you will see that they are pointed at the top with a wider base. S1 is filled with a pale blue bar, as is the lower portion of S2, these bars being joined by a pale yellow, wavy line. Compare these attributes with our resident hawkers, described earlier and you should be able to tell the difference:





Common Hawker © Allan Brandon