Wildlife of Barcombe Parish – Dragonflies & Damselflies

Some personal observations (to 30 September 2020) Simon Linington¹ & Nick Lear

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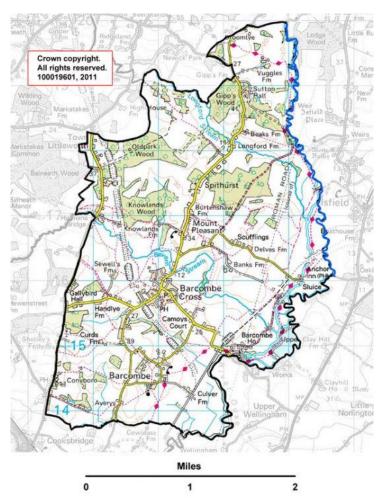
Introduction

Dragonflies and damselflies are predatory insects that are colourful and aerial as adults. As adults, dragonflies hold their wings out from the body when perched, have pairs of wings that differ in shape and are larger than damselflies. The latter are rather delicate, have identical pairs of wings and tend to sit with their wings folded along the body. Being in the warmer south of the country, Sussex is a good county in which to see these insects and by far the majority of the county's species have been recorded in Barcombe Parish. They can be found in many places within the parish - even in gardens (especially those with ponds). One good location to see them is along the River Ouse at Barcombe Mills.

Map and place names

- For simplicity, in this document both 'Barcombe' (proper) and 'Barcombe Cross' are referred to as 'Barcombe'.
- Barcombe Parish has two reservoirs a small farm one located below the new village hall and South East Water's Barcombe Mills Reservoir. It is important to note that the latter is closed to the public. However, all references to 'Barcombe Reservoir' relate to the second facility.
- Barcombe Parish also has two disused railway tracks (though not all with public access; some stretches that are used by the public require due care). Nearly all references to the 'old railway track' relate to the 1.5 km stretch that runs from just west-north-west of the village as far as the Secret Campsite to the north-west of Knowlands Wood.
- Barcombe Mills refers to the stretch of the River Ouse from the Barcombe to Clayhill road along to just west of Barcombe Reservoir.

Map of Barcombe Parish (ref. Barcombe Parish Council website)



Status

Two tables are shown. Table A shows the 25 species personally recorded in Barcombe Parish. The status shown for each species provides a rough indication of their frequency in the parish in an 'average year' based on personal opinion. Table B notes one species within the database of the Sussex Biodiversity Records Centre that has been recorded by others. Consequently, 26 species have been recorded in the parish to date.

Table A. Species personally recorded in the parish

Common = one or more individuals likely to be seen on the wing during a half day walk in the parish: in the right habitat; at the correct season; under reasonably bright, still, warm and dry weather conditions; and in an 'average' year. **Fairly common** = as 'Common' but generally less abundant. **Scarce or local** = may take rather more effort because they tend to occur at specific sites. **Unusual** = less than annual. The flight seasons shown in the table are those noted in Belden *et al*, The Dragonflies of Sussex except for Southern Migrant Hawker where they are from Brooks *et al* (see references). The dates on the photographs also give some clue as to expected season and possible locations to observe the different species.

Species	Season	Status	Comments
Beautiful Demoiselle	Late May – early September	Common	Can be abundant e.g., along Old Railway Track
Banded Demoiselle	Mid May – early September	Common	
Emerald Damselfly	Late June – late September	Unusual	Sightings by NL on Knowlands Farm
Large Red Damselfly	Late April - September	Common	Usually one of the first species on the wing
White-legged Damselfly	Late May – early August	Common	Often in quite dry locations
Azure Damselfly	Mid May – early September	Common	Can be abundant
Common Blue Damselfly	Mid May – late September	Fairly common	Mainly around larger ponds and reservoirs
Blue-tailed Damselfly	Mid May – early September	Common	
Red-eyed Damselfly	Mid May – late August	Fairly common	Ponds with lilies
Small Red-eyed Damselfly	Mid June – early September	Fairly common / Scarce or local	Ponds with surface water weed or lilies. Increasing – first
			UK breeding record was 1999
Hairy Dragonfly	Early May – early July	Scarce or local	E.g., Barcombe Mills
Southern Migrant Hawker	Mid-June – mid September	Unusual	First records in 2020
Migrant Hawker	Late July – late October	Common	Can be abundant in late summer / autumn e.g., Old
			Railway Track, Knowlands Wood
Southern Hawker	Early July – early October	Common	
Brown Hawker	Early July – early October	Fairly common	E.g., Knowlands Farm & Wood
Emperor Dragonfly	Late May – early September	Common	

Species	Season	Status	Comments
Golden-ringed Dragonfly	Mid June – early September	Unusual	One record (SL) personally – see photos. Also one record
			in 2010 (Sussex Biodiversity Records Centre)
Downy Emerald	Mid May – late July	Scarce or local	E.g., Knowlands Farm
Brilliant Emerald	Early June – late August	Scarce or local / unusual	E.g., Reported from Barcombe Mills
Four-spotted Chaser	Late May – mid August	Scarce or local	E.g., Knowlands Farm
Scarce Chaser	Mid May – mid July	Scarce or local	E.g., Barcombe Mills
Broad-bodied Chaser	Mid May – early August	Common	
Black-tailed Skimmer	Late May – early August	Scarce or local	
Common Darter	Mid June – late October	Common	November in some years
Ruddy Darter	Late June – late September	Scarce or local	

Table B. Species recorded by others in the parish

In addition to those noted in Table A, a species noted in the database of the Sussex Biodiversity Records Centre at Woods Mill (Sussex Wildlife Trust) is:

	Date last recorded
Variable Damselfly	2000



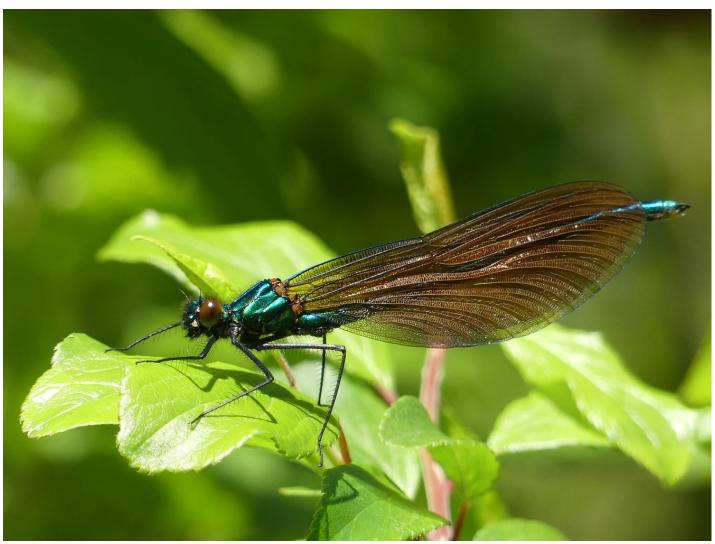
Knowlands Farm Pond – a good site for species that like to rest on water lily pads such as Common Blue and Red-eyed Damselflies

Images

All images were taken in the parish and by SL unless otherwise labelled as taken by NL. The intention is to gradually improve the image quality as opportunities arise.

The adult male dragonflies and damselflies found within the parish are mostly relatively easy to identify given the small number of species involved and the fact that they are well-marked. Things to look out for are patterns on the thorax (body immediately behind the head), the abdomen (long thin part of the body behind the thorax) and the wings. Other things such as the colour of the eyes, legs and wing spots (pterostigma) also help. Females and immatures can be more of a challenge in that they can be quite differently marked or coloured to the males in many species. Where males and females are very similar either as adults or immatures, sexing of individuals is often possible by looking at the tail appendages. Use of close-focusing binoculars or, even better, reference to digital photos taken on a camera or phone will help with the identifications. Of course, the flying adult is just one stage in the life cycle and identification of larvae to species is more of a specialist subject.

Damselflies



Beautiful Demoiselle (young male), Old Railway Track, 10 May 2018. There are two species of these bright, shiny Demoiselles. This species has completely dark wings. Sometimes, it can be abundant. When fully mature, the eyes are almost black.



Beautiful Demoiselle (male), Old Railway Track, 22 June 2019.



Beautiful Demoiselle (female), Barcombe, 14 July 2016. Although extremely similar to the female Banded Demoiselle, the females of this species have noticeably brown wings.



Beautiful Demoiselles, Knowlands Farm, 7 June 2016 (photo – NL). This photo shows the dark wing coloration and also the independent action of the two pairs of wings.



Banded Demoiselle (males in flight), Barcombe Mills, 20 June 2016. This species is distinguished from the Beautiful Demoiselle by the dark band on each wing of the male which shows up well in flight.



Banded Demoiselle (male), Barcombe Mills, 20 May 2016.



Banded Demoiselle (female), Barcombe Mills, 9 June 2016.



Banded Demoiselle (male), Knowlands Farm, 2 July 2019.



Banded Demoiselle (young female), Longford Stream, 20 July 2019. Very difficult to tell from the female Beautiful Demoiselle though this species tends to have a greenish wash to the wings. Accompanying males of course help identification.



Emerald Damselfly (male), Knowlands Farm, 14 July 2013 (photo – NL). For every rule there is an exception – this damselfly perches with its wings open. It has an emerald green top to the thorax, blue eyes and blue at the base and tip of the abdomen.



Emerald Damselfly (male), Knowlands Farm, 14 July 2013 (photo – NL). The wing spots are dark bordered at each end with a narrow pale band.



Large Red Damselfly (male), Barcombe Mills, 20 May 2016. The only red damselfly likely to be seen in the parish. It is nearly always the first species on the wing each year.



Large Red Damselfly (male), Old Railway Track, 28 May 2018.



Large Red Damselfly (female), Old Railway Track, 10 May 2018.



Large Red Damselfly (pair in mating 'wheel'), Barcombe, 12 May 2016.



Large Red Damselfly (pair in mating 'wheel'), Barcombe, 7 May 2018. The male grabs the female using his tail ('in tandem'). The female then brings the tip of her tail up under the male in order to mate.



White-legged Damselfly (male), Knowlands Wood, 3 August 2018. The whitish legs and pale blue colour are diagnostic. It also has pale brown wing spots.



White-legged Damselfly (male), Spithurst Churchyard, 30 June 2019.



White-legged Damselfly (male), Knowlands Farm, 3 June 2019.



White-legged Damselfly (immature female form *lactea*), Knowlands Farm, 14 July 2017. This insect has been described in textbooks as looking like a flying matchstick!



Azure Damselfly (newly emerged female), Barcombe, 27 April 2020. Many young (teneral) damselflies have a washed out colour initially.



Azure Damselfly (male), Barcombe, 12 May 2016. This is by far the most common damselfly in the parish. It will readily visit garden ponds. Males are identified from the similar Common Blue Damselfly by the 'U' shape at the top of the abdomen, the black 'bow-tie' at the tip of the abdomen and the arrangement of stripes on the thorax.



Azure Damselfly (young female), Barcombe Mills, 20 May 2016.



Azure Damselfly (female), Barcombe Mills, 8 June 2020. The female is usually green instead of blue but with the same markings on the thorax. The abdomen has more dark markings than that of the male.



Azure Damselfly (pair in tandem), Barcombe, 27 May 2016.



Azure Damselfly (pair mating), Barcombe, 24 May 2020.



Azure Damselfly (pair in tandem), Barcombe, 6 June 2018. Following mating, the female still held in tandem by the male, is egg laying around garden pond lily pads.



Common Blue Damselfly (male), Barcombe Reservoir, 6 July 2020. This species tends to favour larger ponds than the Azure Damselfly.



Common Blue Damselfly (male), Knowlands Farm, 25 June 2017. Markings on the thorax differ from those on the Azure Damselfly in that this one has broad blue stripes. The most easily recognised feature is the black 'mushroom' shape at the top of the abdomen. It also lacks the Azure's black markings at the tip of the abdomen.



Blue-tailed Damselfly (male), Barcombe, 3 July 2016. This damselfly is quite similar to the Azure damselfly but has a dark abdomen with a blue tip. It has a bicoloured spot on each wing. This species regularly visits garden ponds.



Blue-tailed Damselfly (male), Barcombe, 6 June 2018.



Blue-tailed Damselfly (young female *rufescens* form), Barcombe Mills, 8 June 2020. Females start life in one of two forms, this and *violacea*. This form with a reddish thorax is particularly striking. It matures into another form, *rufescens-obsoleta*. *Violacea* can mature into either male-like or *infuscans* forms. See Brooks *et al* (2014).



Blue-tailed Damselfly (young female *violacea* form), Barcombe Mills, 20 May 2016.



Red-eyed Damselfly (male), Knowlands Farm, 21
May 2019. One of two red-eyed damselfly species, this one is quite similar to the Small Red-eyed
Damselfly though is slightly larger and has a neat blue band on the tip of the abdomen that is sharply demarcated from the black – almost like a blue bandage wrapped around its tail.



Red-eyed Damselfly (pair in tandem, female egglaying on lily flower bud), Knowlands Farm, 30 May 2020.



Red-eyed Damselfly (female), Barcombe Mills, 8 June 2020. The predominantly green female has brownish eyes.



Small Red-eyed Damselfly (male), Barcombe, 5 August 2020. This species was first recorded breeding in the UK in 1999 and has since spread rapidly. One of the easiest ways to distinguish this species from the Red-eyed Damselfly is by the stepped blue pattern on the tip of the abdomen. The individual shown was on vegetation in a garden pond.



Small Red-eyed Damselfly (male), Barcombe, 19 July 2018.



Small Red-eyed Damselfly (pair in tandem), Knowlands Farm, 21 July 2018.



Barcombe Mills – a good site for a wide range of both damselflies and dragonflies

Dragonflies



Hairy Dragonfly (male), Barcombe Mills, 8 June 2019. This is one of the earliest dragonflies on the wing each year. Its yellow and brown striped thorax is markedly hairy and its abdomen has paired blue markings along its length. The eyes are blue.



Hairy Dragonfly (male in flight), Barcombe Mills, 1 June 2017.



Hairy Dragonfly (female), Old Railway Track, 3 June 2019. The female has less well-marked yellow stripes on the thorax and the blue of the male's abdomen is replaced by yellow.



Hairy Dragonfly (male), Knowlands Wood, 10 May 2018.



Hairy Dragonfly (female) edge of Knowlands Wood, 9 May 2020.



Southern Migrant Hawker (immature male), Knowlands Wood, 22 June 2020. This is a newly-arrived species in the country that is gradually expanding its range in Sussex. This was the first sighting in the parish with a female in the same location (John Luck) next day. When mature, the males have a large amount of blue coloration (including the eyes) and inhabit wet ditches. The young males are gingery in colour with eyes the same colour as marrow-fat peas!



Migrant Hawker (young male), Old Railway Track, 30 July 2018. This species is quite similar to the Southern Hawker but has a much less striking pattern on the thorax and there is no coloured band at the tip of the abdomen. This individual is a young male. Adult males have blue eyes.



Migrant Hawker (pair), Knowlands Wood, 11 August 2014 (photo – NL). The male is on the left.



Migrant Hawker (female), Old Railway Track, 30 July 2018. This species can occur in some numbers in woodland rides during late summer and into autumn. Like the Southern Hawker, it has a yellow 'golf-tee' shape at the top of the abdomen.



Migrant Hawker (male in flight), Knowlands Farm, 19 September 2020. The brownish thorax with slightly less bold yellow markings are a relatively easy way to identify this species from Southern Hawker in flight.



Southern Hawker (male), Knowlands Farm, 11 August 2018. The male of this species has bold yellowish-green stripes on the thorax and a set of complete bluish bands near the abdomen's tip. It uses a wide range of habitats and will visit gardens. Seen from mid-summer into autumn.



Southern Hawker (female – egg laying at edge of garden pond), Barcombe, 7 October 2018.



Southern Hawker (female), Knowlands Wood, 30 June 2019. The unbroken colour bands on the tip of the abdomen are reasonably clear in this photo.



Brown Hawker, Knowlands Farm, 11 July 2019. This species of dragonfly is readily identified by the brown wash to the wings.



Brown Hawker (female egg-laying), Longford Stream, 24 August 2019.



Emperor Dragonfly (male), Knowlands Farm, 27 May 2018. This is one of our most impressive dragonflies, a species that tends to dominate at the ponds where it breeds. It also ranges widely over open countryside. It is large with apple green eyes and thorax. The male has a considerable amount of blue on the abdomen.



Emperor Dragonfly (female – egg laying), Knowlands Farm, 11 July 2019. The female is predominantly green.



Golden-ringed Dragonfly (male), Old Railway Track, 21 July 2018. More at home on Ashdown Forest, this impressive species is an unusual visitor to the parish. It has a black abdomen with a set of golden rings. The eyes are green.



Downy Emerald, Knowlands Farm, 28 May 2016. This species is quite scarce in Sussex but likes ponds surrounded by trees. It has bright green eyes and, in flight, a characteristically up-tilted abdomen. This one is in flight with a Marsh Frog in the background!



Downy Emerald (young male), Knowlands Farm, 16 May 2013 (photo – NL). This individual had crash-landed. Note its brownish eyes. Adults have bright green eyes. It also has a bronze-coloured wash to the abdomen which along with the shape of the tail appendages help identify this.



Downy Emerald, Knowlands Farm, 2 June 2017.



Brilliant Emerald (male), Bevern below Camoys Farm, 20 June 2016. This local species is very similar to the Downy Emerald and occurs in similar habitat though preferring greater shade. Note especially the bright green abdomen and yellowish wash to the wings. Other important features not visible here are the shape of the tail appendages and the amount of yellow on the 'face'.



Four-spotted Chaser (male), Barcombe Reservoir, 20 May 2019. This quite stocky, brown dragonfly is characterised by the set of black-spots on the wings. 'Four-spotted' seems a misnomer!



Four-spotted Chaser, Old Railway Track, 7 May 2020.



Scarce Chaser (male), Barcombe Mills, 20 June 2016. Superficially similar to the male Black-tailed Skimmer which also has a powder blue abdomen with a dark tip, this species has bluish eyes and dark patches at the base of the wings.



Scarce Chaser (male), Barcombe Mills, 1 June 2017. This species is not quite so scarce now as it was when given its name.



Scarce Chaser (young female), Barcombe Reservoir, 18 June 2018. The young male also has an orange abdomen like the female but the arrangement of the tail appendages help sex this individual.



Scarce Chaser (young male), Barcombe Mills, 20 May 2016. Barcombe Mills is a good place to see this species.



Scarce Chaser (female), Longford Stream, 1 June 2020. This mature female has dark eyes. The dark wing tips unique to this species are also clear.



Scarce Chaser (male), Longford Stream, 1 June 2020.



Broad-bodied Chaser (male), Barcombe, 7 June 2016. This powerful dragonfly is also one of our most well-known. The male has a powder blue abdomen edged with yellow spots. It often visits garden ponds.



Broad-bodied Chaser (female), Barcombe, 5 June 2016. The female has a brownish abdomen edged with yellow spots.



Broad-bodied Chaser (female), Old Railway Track, 2 June 2020.



Black-tailed Skimmer (male), Knowlands Farm, 30 June 2019. This is quite a common species that likes to perch on bare soil. It has greenish eyes unlike those of the Scarce Chaser.



Black-tailed Skimmer (young male), Barcombe Reservoir, 6 June 2016. The yellow and black pattern on the abdomen of the young male is similar to that of the female; the eyes are paler.



Black-tailed Skimmer (female), Knowlands Farm, 26 June 2019. The abdomen pattern tends to suggest it has a rather triangular cross-section. This species often perches with its wings held forward.



Common Darter (male), Barcombe, 14 July 2016. This species is a familiar sight from mid-summer on. Males have an orange-red abdomen. They regularly visit garden ponds.



Common Darter (male), Knowlands Wood, 4 August 2016. This species is seen well into the autumn – sometimes even on warm November days.



Common Darter (recently emerged), Knowlands Farm, 15 July 2017.



Common Darter (male), Barcombe, 7 August 2018. Unlike the Ruddy Darter, this species has yellow-striped legs.



Common Darter (female), Knowlands Wood, 5 July 2020.



Common Darter (female), Barcombe, 18 September 2020



Ruddy Darter (male), Knowlands, 30 July 2014 (photo – NL). Males of this species are a brighter red than in the Common Darter. This species also has a more waisted appearance to the abdomen and all-black legs.



Ruddy Darter (female), Knowlands Wood, 25 June 2017.



Ruddy Darter (male), Longford Stream, 20 July 2019. A very smart-looking dragonfly.



Ruddy Darter (male), Knowlands Farm, 21 July 2019.

References

The Sussex Dragonfly Group website: In development

The British Dragonfly Society website: https://british-dragonflies.org.uk/

The Sussex Biodiversity Records Centre website: https://sxbrc.org.uk/home/

Belden PA, Downer VJ, Luck, JC, Prendergast HDV and Sadler D. *The Dragonflies of Sussex: A guide to their distribution and conservation*. Essedon Press.

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Acknowledgements

- Thanks to John Luck for his help in getting one of us (SL) started with the identification of this insect group. Thanks also to Geoff Gowlett for helping SL particularly with some of the early identifications and for checking this updated document.
- Thanks to Bob Foreman of the Sussex Biodiversity Records Centre (SxBRC) for providing information on this and other taxonomic groups.
- Thanks to those who have submitted their records, directly or indirectly, to the SxBRC thereby helping us to build up a picture of this taxonomic group within the parish.
- Some of the observations have taken place during the monthly wetland bird surveys at Barcombe Reservoir which are facilitated by South East Water. Consequently, thanks go to the company's ecologists: Patrick Austin, Sam Pottier and Richard Dyer; and formerly, Christina Pullan.

