

## Dragonflies

Dragonflies are a wonderful evolutionary success story. They are beautifully evolved for flight, having powerful flight muscles and wings that move independently. They are incredibly agile and manoeuvrable and are able to hover, fly forwards, backwards, sideways and to rapidly change direction and speed of flight.

Adults feed on flying insects, especially small flies, midges and mosquitoes. They are visual hunters who see in colour/ultraviolet and polarised light. Their large compound eyes are made up of as many as 30,000 lenses. Many species consume their prey on the wing. Indeed so specialised are their legs that they cannot walk on a horizontal surface – which makes emergent pond plants important.

Beautiful to watch though they are, the adult phase of their life is short. Most don't live longer than a month, and some fall prey to another aerial master, the Hobby, a bird that hunts them at dawn and dusk when the cold slows their reflexes. They spend most of their lives as nymphs in an aquatic environment. For up to five years they are mostly ambush predators, feeding on anything that is smaller than them such as insect larvae, water fleas, snails, small fish and tadpoles.

The Sussex Branch of the British Dragonfly Society has published an excellent guide to The Dragonflies of Sussex. There are 17 species of dragonfly that have been confirmed to breed in Sussex (and 12 species of the related damselflies). Only five dragonflies have been recorded in the parish. They are Southern Hawker, Migrant Hawker, Emperor Dragonfly, Broad-bodied Chaser and Common Darter.

The first two have intricate patterns of blue (male) or dull green (female) across the top of the abdomen (tail), while the large emperor has distinct blue marking down the sides of the abdomen. The broad-bodied chaser has a wide, flat abdomen, which is uniform bright blue in the male and yellow in the female. The common darter has a dull orange-red (male) or yellow-brown (female) abdomen.

If you have any sightings or, better still, you find any exuviae (the cast exoskeleton or 'skin' of the nymph left by the emerging adult) around your ponds, please let us know.

Dragonflies have survived mass extinctions, ice ages and past global warming so it is likely that these amazing insects, which predate man by over 300 million years, will survive us.

Jonathan Wood June 2010