## WOOLSTON EYES ODONATA 2005

A reasonable year for dragonflies on the Reserve with fifteen species recorded, and breeding activity observed for eleven. The weather was variable during the season: many days being too cold and wet for flight, then a hot, dry spell resulting in the West Pool on No.1 bed almost completely drying up. As this pool had been the focus of most breeding activity, it was difficult to ascertain what would have survived, but it is possible for the larvae of some species to bury themselves in the mud for a few weeks until the right conditions return.

I started recording at Woolston on the Open Day, 26<sup>th</sup> June, so that any dragonfly activity up to this date went unrecorded. The Dragonfly Conservation stand at the Open Day attracted a great deal of attention; these amazing insects are becoming increasingly popular with birders, and although there were not many dragonflies seen flying about that day, there was much interest in their development through the larval stages under water to the emergence of the beautiful free-flying adults which mature, mate, oviposit, and die in only a few weeks.

Of the family Aeshnidae, Brown Hawker (Aeshna grandis) is still the most common on the Reserve. Active from June to the end of September, up to six were seen hunting at the same time and females were observed ovipositing in the West Pool on No.1 bed and the Sandpit Pond on No.4. There were many sightings of Southern Hawker (Aeshna cyanea) males hunting around the south bank of No.3 bed and perched in the sunshine at the side of the footpath whilst a female was found roosting in a bush by the footbridge. On 4<sup>th</sup> July a female was prospecting for a site to oviposit at the viaduct pools, but did not linger. Although this species prefers shaded woodland ponds, these pools may now be too dark and nitrogen rich (due to so much leaf litter dropping into them). Common Hawker (Aeshna juncea) was seen occasionally, and although breeding has been proved in the past, there was no evidence this year. This swift, strong flyer was seen on the Sandpit Pond twice in August waiting for a female to arrive. A fairly recent arrival to Woolston, Migrant Hawker (Aeshna mixta), was first mentioned in the 1998 report by Scott Kennedy when three males took up residence on Warman's Pit. Being a late summer and autumn dragonfly, the first sighting this year was on 2<sup>nd</sup> September when a male flew round the East Pool on No.1 bed keeping low near the reeds where he was searching for females. Later in September two males at least perched on the brambles on the south bank of No.3 bed. but no other breeding activity was observed.

Over the past ten years Emperor Dragonfly (Anax imperator) has made a rapid expansion northwards and was first recorded at Woolston in 2001. Now this regal dragonfly is well established and males can be seen patroling a territory on any large water body. A female was ovipositing in the West Pool on No.1 bed in July and August and two males took up residence on the Sandpit Pond at the same time. Their territories were on opposite sides of the water and they could be seen to clash each time they both ventured towards the centre of the pond, each had females coming into their side of the pond ovipositing. This is not complete proof of breeding, but it is more than a possibility, this species certainly seems to be a dominant presence on the Reserve.

Of the family Libellulidae, Four-spotted Chaser (Libellula quadrimaculata) is the only representative of chasers. This widespread species is common at Woolston and was flying in abundance on 14<sup>th</sup> July, although it was more likely present from late May. Eight to twelve females were seen ovipositing on the West Pool of No.1 bed with a large number of males also present making rapid aggressive territorial flights from a favourite perch. The Sandpit Pond is also good for this dragonfly and two were still present on 16<sup>th</sup> August, which is very late in the flight period for this species.

Three types of the genus Sympetrum were found this year: Common Darter (Sympetrum striolatum) being the most in evidence, was found throughout the reserve. Hundreds of tenerals flew up from the surrounding vegetation of the West Pool on No.1 bed on 14th July and many exuvia (discarded larval cases) were found. This darter was to be seen hunting, mating and ovipositing in many locations, 50 plus perched in the grasses and shrubbery of No.1 bed in August; ranging in age from red adult males to tenerals not long emerged when sex cannot be determined. On a very hot day 2<sup>nd</sup> September, up to 50 pairs were mating and ovipositing as we showed Caroline Daguet (from the British Dragonfly Society) around the Reserve and they were still being observed well into September, which is not surprising as this species can go on into October and November in a mild autumn. It was nice to find the pretty Ruddy Darter (Sympetrum sanguineuim) perched around the viaduct pools, probably liking the more shaded habitat in July. First added to the reserve list in 2001, small numbers were seen this year on No.1 bed and it is hoped that it is breeding, although the British population is regularly supplemented each year by migrants from the Continent. Black Darter (Sympetrum danae) once bred on No.1 bed. First recorded on the Reserve in 1989, it occurred again in 1993 when seventeen adults were seen mating and ovipositing, and newly emerged tenerals were found in 1994. Since then these pools have dried up and there have been no recent breeding records, so it was a surprise to find a dainty little black male on 2<sup>nd</sup> August and a female on the 12<sup>th</sup>. This species prefers acidic, boggy waters so it is likely that these were wanderers. Adults frequently disperse in August and September to areas not suitable for breeding and could have come from other breeding sites such as Risley Moss.

Of the damselflies, **Blue-tailed** (*Ischnura elegans*) was by far the most numerous with several female colour variations apparent on most beds and they were frequently seen mating and ovipositing up to mid August. **Common Blue** (*Enallagma cyathigerum*) and **Azure Damselfly** (*Coenagrion puella*) were also seen frequently, whereas **Large Red Damselfly** (*Pyrrhosoma nymphula*) was only reported once from No.3 bed on 15<sup>th</sup> July. I suspect this was lack of observation at its peak flying time of late May to June rather than the species being missing. Although **Emerald Damselfly** (*Lestes sponsa*) is very widespread in England, it is difficult to locate due to its habit of flying infrequently and only fluttering a brief distance when disturbed. On close examination of vegetation around all ponds, it was discovered in several locations. A couple of males were found first on the West Pool of No.1 bed in July, several males and a pair in cop (mating) were on the Sandpit Pond in August, another pair in cop were on the Viaduct Pools, and a pair with the female right under the water ovipositing in the West Pool on 16<sup>th</sup> August, the last sighting being 31<sup>st</sup> August.

In the years of odonata recording at Woolston, Banded Demoiselle (Calopteryx splendens) has been seen several times. In 2005, on the Open Day, a striking male was found under the footbridge to No.3 bed flying across the river. Scott Kennedy

reported in 1994 that the nearest breeding colony was only 2km away so it may well be colonising Woolston, if not on the pools then perhaps on the canal. Another sighting was had on 14<sup>th</sup> July but this could have been the same specimen.

Although no new species was added to the Woolston list during 2005, the chance of new and rarer dragonflies visiting and staying increases all the time. Milder winters and global warming mean breeding ranges are slowly extending northwards. In 1994 Scott said, "Maybe Emperor Dragonfly will visit Woolston and even Migrant Hawker might be recorded", and here we are with Emperor Dragonfly a very dominant breeder and Migrant Hawker regularly seen each year. What could be next? Woolston is an ever-changing scene, and where there is water there are dragonflies; who knows what the changes may bring.

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