

ODONATA AT WOOLSTON EYES – 2007

The dragonfly season started with much promise in April, which was one of the hottest and driest on record. By the end of the month the west pond on No.1 bed was coming alive with damselflies and it looked as if everything was going to be unusually early. The first to emerge in spring is Large Red Damselfly (*Pyrrhosoma nymphula*); at least eight with two pairs in cop were seen, and other newly emerged teneral were around the pond. For the first time at Woolston I identified Large Red Damselfly exuvia, proving breeding of this species at last.

By the beginning of May other damselflies were in evidence, Blue-tailed Damselfly (*Ischnura elegans*) being followed by Azure (*Coenagrion puella*) and Common Blue Damselfly (*Enallagma cyathigerum*). On 9th May one teneral Four-Spotted Chaser did its maiden flight from the pond edge to the grassland and stayed there hardening off for the duration of my visit. This illustrates the importance of suitable vegetation around the edge of the pool in which newly emerged dragonflies can hide. When hardened enough, they then fly up into nearby trees or bushes where they can stay for several days maturing to become the beautiful dragonflies we see hunting and interacting around a pond.

The 9th May also saw two quite large damselflies emerge near the bund on No.3 bed. They were on the bulrush stems, too far out in the water for the exuvia to be retrieved, but the emerging damselflies looked exceedingly large and dark. On 25th May I managed to retrieve a similar exuvia from another part of the bund river near the footbridge and this time it was obvious from the size (approximately 30mm), the darkness and the bands across the caudal lamellae when examined through a magnifying glass that it was a Red-eyed Damselfly (*Erythromma najas*). The breeding activity recorded for the first time last year (2006) had been successful and now there was a good colony of Red-eyed Damselflies here with at least six males and two females already mature enough to be mating and ovipositing. Although this area of bund river is not typical of its normal habitat, (usually liking open water with broad-leaved pond weed or water lily leaves to perch on), the large floating mats of algae could be why this site has become attractive to this species. Red-eyed Damselfly larvae can take up to two years to develop, so although seen here for the first time in 2006 it is more than likely that they had just been overlooked for a year or two before.

At the end of May hundreds of Blue-tailed Damselflies with females of different colour forms were around the Reserve, and I found three exuvia of newly emerged Four-spotted Chasers (*Libellula quadrimaculata*), but by the time I managed another visit on 7th June the weather had taken a turn for the worse and continued to be cold and wet for the majority of the summer.

Apart from the Red-eyed Damselflies, which seemed robust enough to survive the weather, most other damselflies and chasers were hardly seen again on the Reserve all season. Maybe they could not fly enough to feed and perhaps those emerging were washed off the plant stems back into the water. Whatever the reason, all water bodies were quiet whenever I managed to visit. The hopes in 2006 of Broad-bodied Chasers (*Libellula depressa*) and Black-tailed Skimmers (*Orthetrum cancellatum*) colonizing were dashed and there were no reports (as far as I know) of the stately Emperor (*Anax imperator*) which was so abundant in the long hot summer of 2006.

If there was a fine day here and there in June and July I could not manage to get to the Reserve, so how much survived I do not know. Dragonflies can hang in a torpid state sheltered in a tree for quite a long time during bad weather, but there must be a limit to how long they can survive and, of course, if it is too cold and wet to fly they cannot feed or mate.

It was August 6th before I managed to visit on a reasonably fine day. The Sandpit Ponds were so overgrown that I could not find the path down, but there seemed no signs of life through binoculars from the bank. To my delight twelve Red-eyed Damselflies, with two in cop, were around the bund on No.3 bed, and two Brown Hawkers (*Aeshna grandis*) were flying around this area. On No.1 bed the west pond was very quiet and very flooded. Common Darters (*Sympetrum striolatum*) were nowhere near their usual abundance, one Ruddy Darter (*Sympetrum sanguineum*) was a very poor count, and except for one female Brown Hawker ovipositing there was nothing else to be found. Similarly, the Viaduct Pools were overgrown and so flooded that it was only possible to reach the first one; the only Emerald Damselfly (*Lestes sponsa*) of the day was found here. Most of the vegetation that this species likes, small plants around the edge of the west pond, was totally submerged by flooding. It is also likely that their emergence coincided with the worst rains in June and July when they were just washed back into the water and drowned. However, this is a very common and widespread species in the country and I am sure that if our population has been adversely affected it will soon be supplemented from elsewhere.

I had heard reports that Banded Demoiselles (*Catopteryx splendens*) had been seen near the Weir on the Mersey. On 10th August I went to investigate and found seven males and one female which seemed to like this little sheltered area near the bank on the Weir Lane side of the river. Probably the long-leaved weeds growing from the river bed and floating on the surface made a good perch and oviposit site. This is a species that has spread greatly in recent years due to the cleaning up of rivers; they had been known to breed on the Bollin, which runs into the Mersey, so it was just a matter of time before they colonized here. Odd males had been seen in previous years, in several different locations on the Reserve, but this is the first proof of colonization and breeding activity for the Eyes. Whilst they will always be on its periphery because they are a flowing river species it is now likely that they will be seen more regularly. Male Banded Demoiselles are a delight to see with their iridescent blue bodies and fluttering banded wings; they have been described as little helicopters. In fact, the world's largest damselfly, which lives in the rain forest in Panama, is called the Helicopter Damselfly; when in flight the bands on its wings give the impression of the whirring blades of a helicopter, an amazing creature at least 6 inches long with a wingspan of about ten inches.

The weather improved slightly in August and on the 22nd there were at least 20 Brown Hawkers on the Reserve, and Migrant Hawkers (*Aeshna mixta*) were seen on each bed, with a pair in cop on the east pool of No.1 bed. These two hawks seemed to have survived the bad weather, due to their late emergence I suspect. I was also very relieved to see a lovely male Southern Hawker (*Aeshna cyanea*) flying around the car park near No.3 bed, and I am sure that there was a female by the second barrier as I left on 2nd September, so hopefully this species lives to breed another day.

In conclusion, the hopes of 2006 were not fulfilled, nor was it a typical year on the Reserve. The fortunes of dragonflies go up and down naturally, affected not only by the weather but also by habitat change and possibly global warming. The Black Darter was proved breeding in 1994 but, due to habitat loss, is now only a rare visitor, whilst Migrant Hawker had not even been mentioned in 1994 but now in 2007 has not only been proved to breed but has taken over as our most common hawk on the Reserve and is still spreading northwards.

Let us hope for a warm, dry summer in 2008 and a good dragon year.

Trish Thompson

Glossary

Exuvia - an empty larval case

Teneral - a newly-emerged adult dragonfly, sometimes shiny and lacking the mature adult colouration

Caudal lamellae - plates at the tip of the abdomen, often leaf shaped.

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