

# 2004 BEDFORDSHIRE DRAGONFLY REPORT.

The year 2004 for Dragonflies in Bedfordshire has seen some gains and some losses. There has not been agreement by observers on the effect of the weather during the summer, as some species seem to have benefited while others have suffered. Heavy rain and lack of sunshine at critical emergence times will knock back any species involved. It has always been the Recorders aim to produce an accumulating Database of dragonfly records and publish distribution maps of these records. However the transfer from paper to digital recording has not been smooth and so a fresh start will be made from 2005, using the British Dragonfly Society's (BDS) 'Darter' programme. This hopefully will reduce the workload and errors of inputting and transferring records and allow the production of distribution maps. The 2001-2004 Database of existing records will be included into the Bedfordshire Records Centre's records and the BDS's records.

During 2004 only 21 species were seen compared to 22 species in the previous four years. The loss was of Scarce Blue-tailed Damselfly that was previously found in Sundon Pit. The other two rare species, Small Red-eyed Damselfly and Scarce Chaser, both showed an increase in their ranges. Dragonflies were recorded from 23 April to 16 November 2004, compared to dates of 17 April to 16 November 2003 and 18 April to 12 November 2002, so there was no real change for the year being reported. For the year a total of 1109 records were obtained, slightly down on the count of 1291 in 2003. For the 2002 – 2004 period, 4480 records have been obtained, or an average of 1494 per year.

## Scarce Blue-tailed Damselfly

For some years now this species has only been found at Sundon Pit, as the site in Houghton Regis Pit seems no longer suitable due to drying out of the water seepages. The Houghton Regis Pit was checked during the year and although there was some water in the seepage area, again no sign of any Scarce Blue-tailed Damselflies could be found. Several different people checked Sundon Pit on at least 25 suitable days within the flight period, but no sign of this Damselfly could be found. Vehicles being driven across the area and scrub encroachment have caused damage to this site, but perhaps the most likely cause of change is again from the loss of the water seepages. Peter Glenister reported that the breeding area was dry from October until December 2003. The usual life cycle of this Damselfly species is only one year, so the loss of records for 2004 is of major concern. It is to be hoped that some Damselfly larvae managed to survive to emerge and mate and a very full coverage of this site will be undertaken during 2005 within the limits of access at this location.

## Small Red-eyed Damselfly

The increase in range and numbers of this species both nationally and within Bedfordshire continues. First recorded in Britain in 1999 and in Bedfordshire in 2001, it was found in 2003 at four sites within Bedfordshire, but during 2004 it was recorded at seven sites and seen as mating at three of these sites. Priory Country Park and Sundon Pit were carry-over sites, but new locations were found at Biddenham, Harlington, Houghton Conquest, Westminster Pond at Ampthill and at the new Wader Scrape at East Hyde just south of Luton. This species is small ( 22-25mm long ) and very frail looking, yet manages to colonise new sites. The East Hyde location is a new water body so this species could only have found the site during 2004. The nearest known site is over 12 Km away in a straight line. Does the Damselfly find it's new sites by chance or by some purposeful action of exploration and suitable location detection ? For such a small Damselfly it is certainly being successful.

## Scarce Chaser

After many years this species has been found at two new locations up river from its usual site at Wyboston. Although the species has moved only 10Km on the same river, it is good news that there are now more active sites and that perhaps the River Ouse is improving in water quality.

## First and Last Dates

Table 1 shows the first and last dates for each species, together with the site and observer and the number of records received for each species. The table also shows the first and last dates from the years 2001 to 2003 for comparison.

SPECIES	FIRST DATE	LAST DATE	No	2001-2003 DATES
Banded Demoiselle	14 May. T.Sharrock Willington	14 August B.Squires East Hyde-R.Lea & Scrape	82	12 May – 13 September
Emerald Damselfly	28 May C.Carpenter Silsoe – Wrest Park	24 August D.Withers Maulden – Duck End	13	8 June – 11 September
White-legged Dam	22 May P.Almond Bromham Lake NR	11 August P.Almond Bromham Lake NR	22	29 May – 4 September
Large Red Damselfly	23 April S.Blain Sandy - RSPB & D.Withers Maulden – Duck End	21 July D.Withers Maulden – Duck End	60	17 April – 3 October
Azure Damselfly	15 May A & M Banthorpe. Bromham Lake NR & H.Griffiths Bedford – Priory Park	9 September D.Withers Maulden – Duck End	73	12 May – 11 September
Common Blue Dam	18 May S.Williams Bedford – Priory Park	7 October P.Almond Bromham Lake NR	89	11 May – 24 October

Blue-tailed Dam	15 May A & M Banthorpe. Bromham Lake NR & H.Griffiths Bedford – Priory Park	1 September D.Withers Maulden – Duck End	97	23 April – 24 September
Red-eyed Dam	15 May H.Griffiths Bedford - Priory Park	8 August S.Williams Bedford – Priory Park	37	3 May – 8 September
Small Red-eyed Dam	22 July P.Almond Biddenham - Pond	27 August P.Almond Biddenham – Pond	15	16 July – 3 September
Hairy Dragonfly	15 May H.Griffiths Priory Park Bedford	16 June D.Anderson Temsford - River Ouse	20	7 May – 18 June
Migrant Hawker	1 July G. White Garden Pond – Sandy	4 November D.Anderson East Hyde - Wader Scrape	78	3 July – 14 November
Southern Hawker	21 June S.Blain RSPB Sandy	9 October S. Plummer Maulden - Duck End	69	7 June – 4 November
Brown Hawker	10 June R.Lawrence Harrold Odell CP	27 September P.Almond Bromham Lake NR	76	17 June – 5 November
Emperor	22 May P. Almond Bromham Lake NR	2 September B.Squires Pulloxhill–Flitton Rd Pond	64	16 May – 28 September
Four-spotted Chaser	23 April I.Dawson Sandy – RSPB	7 August J.Adams Willington - Gravel Pit	35	15 May – 25 August
Scarce Chaser	6 June D.Ball Roxton S.Cham Tepsford	16 June D.Anderson Tepsford - River Ouse	4	17 June –21June
Broad-bodied Chaser	25 May D.Anderson East Hyde - Scrape & S.Plummer - Maulden Wood	13 August C.Carpenter Harrold Odell CP	31	15 May – 9 August
Black-tailed Skimmer	24 May S.Plummer Ampthill– Coopers Hill	9 September D.Anderson East Hyde – Wader Scrape	44	5 June – 13 September
Common Darter	12 June L.Carman Kempston - Coronation Pit	16 November I. & D.Dawson & N.Wood Sandy – RSPB	149	15 May – 16 November
Ruddy Darter	15 June L.Carman Cranfield – Marston Thrift	11 November D.Parsons Chicksands – Lodge Farm	44	25 June – 20 October

Eight species show an earlier First Record date in 2004 than for the total 2001 - 2003 date period. All of these early records were not for a day or so, but for a minimum of two days and usually more like 10 days, up to a maximum of 22 days early. Some of this will be recorder bias, but there does seem to be a trend for earlier emergence in some species, possibly due to milder winters and therefore fitter larvae.

Table 2 shows the number of species flying during the months of September, October and November for the years of 2001, 2002, 2003 and 2004. The numbers do not show that dragonflies are flying later in the year, but suggest if anything they are finishing earlier. This would tie up with the above comments about earlier emergence, as the normal Dragonfly life span will stay the same and if they emerge earlier they will also finish earlier, unless second generations are produced. For 2004 the three species flying during November were Migrant Hawker, Common Darter and Ruddy Darter. In October the two additional species were Common Blue Damselfly and Southern Hawker. In September the five additional species were Azure Damselfly, Blue-tailed Damselfly, Brown Hawker, Emperor and Black-tailed Skimmer. The Migrant Hawker and Ruddy Darter records in November 2004 are three weeks later than in 2003, but the Southern Hawker record in October 2004 is three and a half weeks earlier than in 2003.

	SEPTEMBER	OCTOBER	NOVEMBER
2001	12	6	2
2002	14	6	3
2003	12	5	2
2004	10	5	3

#### General Notes

An interesting observation was made by one of the Recorders (DA) at Roxton while looking at the new Scarce Chaser site. A teneral Brown Hawker was attacked by a Hairy Dragonfly and knocked down to the ground, where it became entangled in Goose Grass. Without human intervention the Hawker would have certainly perished. Interaction between males of the same species is not unusual, but between different species is much less so. A little further along the same site on the same day, a Banded Demoiselle was also rescued from Goose Grass, showing how dangerous this plant species is when growing along the riverside.

Steve Cham reported that on a visit to Wrest Park he recorded 1000's of Red-eyed Damselflies. The high density of the Damselflies resulted in them having a very large mite burden on their abdomens.



Red-eyed Damselfly at Wrest Park. 9 June 2004. Mites along abdomen. Photo by S. Cham.

Steve also reported on hundreds of dead Common Blue Damselflies at Willington Pit washed up along the edge. If the females go under water to egg lay; when finished they float to the surface to be pulled clear by the waiting males. If this process is interrupted by heavy rain, the males are forced to seek shelter and when the females come to the surface they are unable to get free of the water without the males assistance. This is the most likely cause of this mass drowning as heavy rain had occurred in the recent days before Steve's visit.

Another report by Steve was of a large emergence of Common Darters at Coronation Pit, which were being attacked by at least three Hobbys. The birds ate most of their catches on the wing but sometimes they landed to feed, allowing good views to be made.

Tony Smith reported that on the 9<sup>th</sup> August he was surprised to see a Hawker Dragonfly still flying at 9.0pm at Felmersham Nature Reserve. Tony reported that the maximum temperature that day had been as high as 28 deg. C. and during that night the temperature never went below 17 deg. C. so it was a hot evening, but it is unusual to see a Dragonfly active so late in the day.

Graham White reported on Dragonflies using his new pond in Sandy. Graham built the pond in June 2003 and during the rest of that summer saw nine species at the pond. In 2004 four species have hatched from the pond. Blue-tailed and Common Blue Damselflies and Common Darter are all known to have a life cycle of one year in suitable conditions, but Southern Hawker is reported as taking two years to go from egg to adult.

In the 2003 Report, a request was made for details of late flying Dragonflies. On the 4 November 2004 at East Hyde Wader Scrape, one of the Recorders (DA) observed a male Migrant Hawker in good condition. There were also five Common Darters flying. One pair were egg laying. There was a male in good condition and two females in good to worn condition with slight wing damage. The weather was 12 deg. C, sunny with light wind. All these Dragonflies were in a sheltered area.

During the year there was an unconfirmed report of a Downey Emerald Dragonfly at Kings Wood, Heath and Reach. This would be the first record for the county since 1951, although it does occur close by in neighbouring counties; so would all observers please look out for this species during 2005. Also would observers please be aware of the differences between Emerald Damselfly and the Scarce Emerald Damselfly, so that in 2005 we are sure of the species being recorded and not just assume all emeralds are of the normal species ! These two species do occur in the same or similar habitats.

The 2003 Report contained a note about some ponds drying out during the summer of 2003. A number of people responded with details of other ponds that were dry or very nearly so. However 2004 did not produce enough evidence to see if there was any change in site productivity. Many species of Dragonflies can survive in dried out ponds during the summer as larvae can bury into the mud and eggs need not start developing until the spring. So long as there is water back in the pond by the spring most species will cope.

#### Contributors

The following 49 contributors and four Groups have contributed the records, which is an increase on the previous year. We are most grateful to these people for the supply of the records and the increase in our knowledge of Bedfordshire's Dragonflies. Our thanks also go to Steve Cham for the use of his photograph.

J.Adams, D.Allan, I.Allsop, P.Almond, B.Anderson, D.Anderson, Y.Anderson, D.Ball, A.Banthorpe, M.Banthorpe, R.Bashford, S.Blain, S.Brooke, C.Brown, M.Butler, L.Carman, C.Carpenter, S.Cham, B.Cooper, M.Davis, D.Dawson, I.Dawson, M.Eaton, R.Edwards, P.Glenister, D.Green, H.Griffiths, Kate, R.Lawrence, M.McCarrick, D.Odell, M.Palmer, D.Parsons, G.Pickerell, J.Pitts, A.Plumb, S.Plummer, N.Renwick, T.Sharrock, H.A.Smith, B.Squires, T.Thomas, K.Weeden, M.Weeden, G.White, P.Wilkinson, S.Williams, D.Withers, N.Wood. Beds. Birds email Group, BNHS email Group, Dunstable Wetland Centre and the RSPB.

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