

2005 DRAGONFLY REPORT

The 2005 Dragonfly year was again a mixture of high and low events. The high was the occurrence of a vagrant dragonfly species, a Lesser Emperor, found in August at part of the Willington Gravel Pit complex near Bedford. The low was again the lack of any sightings of the Scarce Blue-tailed Damselfly at Sundon Pit, this now being the second year without any records.

A total of 1480 records were received, 144 more than in 2004, from 54 observers, five more than in 2004. This produced records for 21 species, one more than in 2004, with the addition of the Lesser Emperor.

For a satisfactory season, dragonflies need water in their winter sites from at least March until August, warm mornings while hatching and then temperatures of 16° C and above, preferably with sunshine and not more than light winds, during the middle of the day in the flight period. For 2005 the winter water requirement seemed to be all right, but April May and the first half of June and July were mainly cold. The two week periods of June and July ,all of August and the first half of September were generally satisfactory, but then it went cold with only odd days warm enough in October and with overnight frosts occurring in November. Depending on hatching dates this meant that the late season species did better than the early season ones. In Bedfordshire the first dragonfly was seen on the amazingly early date of the 28th March, (See note under Banded Demoiselle), with the next record on the 21st April, just two days earlier than in 2004. The last record was on the 18th November, two days later than in 2004.

Number of Records for each Species

Table 1. lists the number of records of adults for each species in increasing numeric order. Although not proof of species abundance, it does give some indication of this, being a combination of distribution and population, with the bias of observer site preference and maybe ease of species observation ! For comparison the figures for 2004 are also listed.

| Order | Species | | No. of Records | 2004 |
|-------|--------------------------|---------------------------------|----------------|------|
| 1 | Lesser Emperor | <i>Anax parthenope</i> | 3 | 0 |
| 2 | Scarce Chaser | <i>Libellula fulva</i> | 4 | 4 |
| 3 | Hairy Dragonfly | <i>Brachytron pratense</i> | 15 | 20 |
| 4 | Emerald Damselfly | <i>Lestes sponsa</i> | 20 | 13 |
| 5 | Small Red-eyed Damselfly | <i>Erythromma viridilum</i> | 22 | 15 |
| 6 | Broad-bodied Chaser | <i>Libellula depressa</i> | 30 | 31 |
| 7 | Ruddy Darter | <i>Sympetrum Sangineum</i> | 31 | 44 |
| 8 | White-legged Damselfly | <i>Platycnemis pennipes</i> | 44 | 22 |
| 9 | Red-eyed Damselfly | <i>Erythromma najas</i> | 60 | 37 |
| 10 | Four-spotted Chaser | <i>Libellula quadrimaculata</i> | 63 | 35 |
| 11 | Black-tailed Skimmer | <i>Orthetrum cancellatum</i> | 66 | 44 |
| 12 | Banded Demoiselle | <i>Calopteryx splendens</i> | 66 | 82 |
| 13 | Emperor Dragonfly | <i>Anax imperator</i> | 78 | 64 |
| 14 | Brown Hawker | <i>Aeshna grandis</i> | 91 | 76 |
| 15 | Large Red Damselfly | <i>Pyrrosoma nymphula</i> | 99 | 60 |
| 16 | Common Blue Damselfly | <i>Enallagma cyathigerum</i> | 101 | 89 |
| 17 | Azure Damselfly | <i>Coenagrion puella</i> | 110 | 73 |
| 18 | Migrant Hawker | <i>Aeshna mixta</i> | 113 | 78 |
| 19 | Southern Hawker | <i>Anax cyanea</i> | 132 | 69 |
| 20 | Blue-tailed Damselfly | <i>Ischnura elegans</i> | 146 | 97 |
| 21 | Common Darter | <i>Sympetrum striolatum</i> | 182 | 149 |

TABLE 1. NUMBER OF RECORDS FOR EACH SPECIES

First and last dates

Table 2. lists the first and last date for each species, together with the site and observer. The Table is in first to last emergence date order. The Table also shows the first and last dates for the 2001 – 2004 period. The first dates do not show any changes from the usual times, but the last dates for nine of the species are later than for all of the previous five years. This could be due to late hatching due to cold weather, or the dragonflies living longer due to fine weather at the end of their flight seasons.

Whatever the cause it is unusual to find so many dragonfly species flying later than in previous years.

| Species | First Date | Last Date | 2001 – 2004 Dates |
|-----------------------|----------------------------|---------------------------|----------------------|
| Banded Demoiselle | 28 March-D.Otter-East Hyde | 30 Sep.-J.Pitts-Bedford | 12 May – 13 Sep. |
| Large Red Damselfly | 21 April-D.Withers-Maulden | 7 Sep.-S.Brooke-Flitwick | 17 April – 3 October |
| Four-spotted Chaser | 3 May-I. Dawson-Sandy | 9 Sep.-P.Almond-Bromham | 23 April –25 August |
| Hairy Dragonfly | 8 May-M.McCarrick-Sandy | 3 July-S.Cham-Felmersham | 7 May – 18 June |
| Azure Damselfly | 9 May-D.Withers-Maulden | 2 Sep.-D.Withers-Maulden | 12 May – 11 Sep. |
| Blue-tailed Damselfly | 13 May-M.Palmer-Stewartby | 20 Sep.-S.Brooke-Flitton | 23 April – 24 Sep. |
| Red-eyed Damselfly | 15 May-S.Cham-Wyboston | 4 Sep.-S.Cham-Stewartby | 3 May – 8 Sep. |
| Common Blue Dam. | 15 May-H.Griffiths-Roxton | 2 Oct.-S.Cham-Willington | 11 May –24 October |
| Scarce Chaser | 22 May-A.Grey-Putnoe | 22 June-D.Anderson-Roxton | 6 June – 21 June |

| | | | |
|----------------------|------------------------------|--------------------------------|--------------------|
| Broad-bodied Chaser | 23 May-S.Plummer-Maulden | 19 Aug-C.Carpenter-Marston | 15 May – 13 August |
| White-legged Dam. | 27 May-S.Cham-Roxton | 28 Aug-S.Cham-Willington | 22 May – 4 Sep. |
| Black-tailed Skimmer | 30 May-G.White-Marston | 7 Sep-D.Anderson-East Hyde | 24 May – 13 Sep. |
| Emerald Damselfly | 7 June-C.Carpenter-Stewartby | 12 Sep-D.Withers-Maulden | 28 May – 11 Sep. |
| Emperor Dragonfly | 7 June-M.Eaton-Biggleswade | 14 Sep.-C.Carpenter-Cranfield | 16 May – 28 Sep. |
| Ruddy Darter | 9 June-P.Glenister-Sundon | 15 Nov-R.Bates-Odell | 15 June – 11 Nov. |
| Common Darter | 11 June-P.Glenister-Turvey | 18 Nov.-D.Withers-Maulden | 15 May – 16 Nov. |
| Southern Hawker | 21 June-S.Cham-Silsoe | 23 Oct.-C.Carpenter-Old Warden | 7 June – 4 Nov. |
| Brown Hawker | 22 June-D.Anderson-Tempsford | 24Sep.-S.Cham-Felmersham | 10 June – 5 Nov. |
| Small Red-eyed Dam. | 13 July-S.Cham-Silsoe | 7 Sep.-D.Anderson-East Hyde | 16 July – 3 Sep. |
| Migrant Hawker | 15 July-B&Y Anderson-Bedford | 12 Nov.-S.Cham-Felmersham | 3 July – 14 Nov. |
| Lesser Emperor | 21 Aug-S.Cham-Willington | 23 Aug.-D.Ball-Willington | None |

TABLE 2. FIRST AND LAST DATES FOR EACH SPECIES.

Species Notes

SCARCE BLUE-TAILED DAMSELFLY

This species was last recorded in Bedfordshire in 2003. During 2005 the Sundon Pit site was checked by several people between 31 May and 11 July without any damselflies being found. The likely cause of the loss of this species is the changes to the habitat, due to lack of water probably in the spring of 2004, together with unsuitable vegetation condition. The lack of water was a combination of the increase in plant growth and a reduction of seepage water flow. This site is an SSSI due to this damselfly, which itself is the only dragonfly in Bedfordshire with a 'Biodiversity Action Plan' detailing what management needed to take place and who was tasked with these actions. The loss of this species was preventable! At last in the autumn of 2005 management action was undertaken to clear the vegetation and create suitable shallow water flushes. More work is planned during 2006. It can only be hoped that the damselfly does in fact still survive at this site in small numbers, or that it will recolonise, as the original arrival.

The need for management work on the Wavendon Heath Ponds SSSI, the site of the last record of Black Darter in the county, is also slow in happening, despite a Management Plan being in existence! We lose dragonfly species by bureaucracy and inaction!

LESSER EMPEROR DRAGONFLY

In August 2005 a male dragonfly of the species *Anax parthenope*, was found by Steve. Cham at one of the Willington pits, adjacent to the new Bedford By-pass. Although only staying for three days it was enjoyed by several observers, one of the benefits of quick and widespread distribution of information by the Email Group. The dragonfly was observed to aggressively chase males of the normal Emperor species, resulting in long flights across the pool, so it would appear to have been in good health. The Lesser Emperor is a southern Europe and northern Africa species, extending as far east as Japan, so it is not scarce on a worldwide basis. The species is possibly trying to colonising Britain as sightings are made most years in Cornwall and during 2005 as many as 30 reports of this dragonfly were received for the whole country. This is however the first ever known record of this species in Bedfordshire. The last vagrant dragonfly species to be found in Bedfordshire was in 1995, when several Yellow-winged Darters were found at a different area of Willington.



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LESSER EMPEROR DRAGONFLY-WILLINGTON-21 AUGUST 2006

SCARCE CHASER DRAGONFLY

Still our rarest resident species, with no gains or losses of sites or numbers. The numbers seen are so low they can only be treated with caution. An interesting observation was made by Mr. Grey of a resting Scarce Chaser far from water in Putnoe Wood. This early record was probably of a freshly emerged adult, feeding and maturing, before returning later to its breeding site.

HAIRY DRAGONFLY

Usually one of first dragonflies on the wing but in 2005 it was beaten by the Four-spotted Chaser. Always reported in low numbers, but is this a true indication of its abundance, or of its short flight period before observers get out in the field ?

EMERALD DAMSELFLY

Another species with a low number of records. There was no sign of loss of sites or numbers, but with only 20 records during the year its status needs careful watching.

SMALL RED-EYED DAMSELFLY

Only a few years ago, this species was new to the country and county and in 2005 it continued to increase its spread and numbers, although at a slower rate than in previous years. Sites with suitable habitats of; warm, shallow, still water, sheltered by trees to reduce wind strength and with in-water plant growth that stands a small amount above the water surface, have probably now mainly been colonised. This welcome new species is looking as if it is going to stay as a resident in Bedfordshire.

BANDED DEMOISELLE DAMSELFLY

As mentioned in the introduction, a male Banded Demoiselle was seen on the 28 March by Don Otter on the River Lea at East Hyde, just south of Luton and right on the county boundary. The next record of Banded Demoiselle was at three different sights on the 15 May, which is six weeks later, while the previous earliest record for Banded Demoiselle is 12 May. Despite several visits no repeat sight of the damselfly could be found. It should be reported that the East Hyde site is only two or three hundred metres down river from the outlet of the Luton Sewage Works into the river. The outflow from the Sewage Works is at a higher temperature than the river and it is possible that this is the cause of the damselfly hatching so early.

During the year a check was made at Turvey as the site looked suitable for Beautiful Demoiselle. However no damselflies of this species could be found.

Contributors

Our thanks go to the following 54 contributors and five groups. Without your sightings this report and our knowledge of Bedfordshire's dragonflies would be a lot poorer. Thanks also go to Steve. Cham for finding the star dragonfly of the year, the Lesser Emperor at Willington and for permission to use his photograph of it. Special thanks also to Richard Bashford and Ian Dawson at the RSPB for sending on the wealth of records from that site.

All the records obtained have been archived in the British Dragonfly Society National Data-base and with the Bedfordshire Biological Record Centre.

J.Adams, P.Almond, B.&Y.Anderson, D.& K.Anderson, D.Ball, A.& M.Banthorpe, R.Bashford, R.Bates, C.Beale, M.Best, S.Brooks, M.Butler, L.Campbell, C.Carpenter, S.Cham, J.Childs, A.Cutts, I.& D.Dawson, G.Dennis, M.Eaton, D.Fisher, M.Fleming, K.Fuller, P.Glenister, A.Grey, H.Griffiths, S.Halton, F.James, J.Knight, R.Lawrence, G.Madge, M.McCarrick, E.Newman, D.Otter, M.Palmer, J.Pitts, S.Plummer, D.Pullan, N.Renwick, M.Rule, M.Russell, T.Sharroock, H.A.Smith, C.Tack, M.Ward, J.Wells, G.White, S.Williams, D.Withers, I.Woiwood. The Beds. Birds Email Group, the BNHS Email Group, the Dunstable Wetland Centre Group, the East Hyde Wader Scrape Group and the RSPB The Lodge Group.

David & Karen Anderson.
Dragonfly Recorders.
27 March 2006.

2006 –NOTES

With the 2006 season starting soon- 21 April 2005 was the first normal record last year, can we just add a few requests for the coming season.

- 1 Please supply at least a 4 figure grid reference for each record, with a 6 figure grid reference for the rarer species. We need to be able to locate every record to at least a 1Km grid square.
- 2 Please list numbers seen using the range system listed. A=1. B=2-5. C=6-20. D=21-100. E=101-500, F=500+, or as your best count. 'Few/many/lots' are not possible to enter into the Data-base!
- 3 Please sent records to us using the Beds Birds Email Group, the BNHS Email Group, by direct Email to dragonflies@bnhs.org.uk, by post, or any other method you like. We would prefer for you send records in when they happen, it is less work at the end of the season and special sightings can be circulated to others.

4 Please try to obtain 'Proven Breeding' records of 'Emergence or Exuvia' for each species at each site, as they are the most important records. Garden ponds are valuable for this as they are close by and easy to check daily.

5 Please particularly look for the rarer species. The species with the least number of records in the 2005 table are the ones to target. Continue to check Sundon Pit for signs of Scarce Blue-tailed Damselfly.

6 Please let us have your comments and observations on dragonflies, sites and conditions for the year.

7 Thank you and good dragonfly watching in 2006. Don't forget the Diamond Jubilee Dragonfly meeting at Felmersham on Sunday the 9th July at 10.30am.