

# CHECKLIST AND ACCOUNT OF THE ODONATA (DRAGONFLIES AND DAMSELFLIES) OF THE LONDON BOROUGH OF BEXLEY

Compiled by Chris Rose BSc (Hons), MSc. 6<sup>th</sup> edition. January 2017.



Willow Emerald Damselfly (*Chalcolestes viridis*),  
Foots Cray Meadows, 27<sup>th</sup> September 2016. (Photo: Wren Rose)

## Introduction

This paper details the dragonfly and damselfly species that are found in Bexley, their conservation status and the locations at which they may most readily be found. Species lists are provided for the five best publicly accessible Odonata sites in Bexley.

All species of Dragonfly and Damselfly go through an aquatic larval stage, and are thus dependent on water bodies of various kinds. Ponds, ditches, rivers and lakes are good places to see adults, but before and after breeding they may wander some distance from water and be found in a variety of locations, including woodland and gardens.

Several species appear to be colonising or, in one case, recolonising the UK, often through the Thames gateway area, and seem to be heading in our direction. These are covered in the 'Other species to look out for' section of this document. A number of species are strong flyers, and they and others can be carried long distances by the wind, so that these or indeed wholly unexpected species could show up in the Borough. The big news since the 5<sup>th</sup> edition of this document (April 2016) is that one of these species, the Willow Emerald Damselfly (*Chalcolestes viridis*) has now been recorded – and photographed - in Bexley.

There is much work still to be done on Odonata in the Borough, in particular it would be advantageous to determine which species are breeding at which sites through catching larvae or collecting and identifying the skins (exuviae) left behind when the adult emerges. There are various ditches and waterbodies around the Borough that need a basic species survey, but not all are accessible to the public.

## References:

- My own records.
- Greenspace Information for Greater London (the London biodiversity records centre) data.
- 'Dragonfly News' No. 64. Autumn 2013. Magazine of the British Dragonfly Society.
- 'The Darter', issues 29 (Spring 2012), 30 (Spring 2013), 31 (Spring 2014) and 33 (Spring 2016). British Dragonfly Society publication with a focus on Odonata recording work.
- British Dragonfly Society website at <http://www.british-dragonflies.org.uk/>
- 'Dragonflies of Kent', John and Gill Brook, revised edition, 2009. Published by the Kent Field Club. Includes distribution maps covering Vice-county 16 (West Kent), in which the London Borough of Bexley is situated.
- 'British Wildlife', Volume 28, Number 2, December 2016.
- Personal correspondence from Ralph Todd, Ian Stewart, Karen Sutton and Martin Petchey, conveying records and/or photographs.

## BEXLEY ODONATA IN NUMBERS

**UK total** of resident or regular migrant species **46** (there are a further 9 vagrants, a few of which may now be colonising, and 2 former breeding species not recorded since 1970) [British Dragonfly Society figures].

Known **Bexley total** species: **19**

Known **Bexley extinctions** since the mid 20<sup>th</sup> century: **0** ( It is possible that the Common Club-tail (*Gomphus vulgatissimus*) may once have occurred in the Borough. The Kent atlas notes that this riverine species, which is still found on stretches of the Thames, was recorded at Dartford around 1890 and on the river Darent in June 1939).

**Species at risk in Bexley: 0**

## RESIDENT, AND REGULAR MIGRATORY SPECIES FOUND IN BEXLEY

### Anisoptera – Dragonflies

#### Aeshnidae - Hawker Dragonflies

**Hairy Dragonfly (*Brachytron pratense*)** – This is a notable species in the West Kent (Vice-county 16) context, and is increasing its range. At the time of the 2009 Kent atlas it was thought to still be some way east of the Darent, but was found by myself at Thames Road Wetland in Barnes Cray in 2010, and has been seen egg-laying there since. I found a single individual patrolling a ditch on Erith Marshes, adjacent to Crossness nature reserve, in June 2013. More have been observed here since. I have also seen what, given the early date (June 4<sup>th</sup> 2015) and colouration, was quite probably an individual of this species by the Shuttle between the BETHS and A2 pedestrian footbridges, though it was flying quite high and fast and would not settle, and possibly another in Marlborough Park on the same date, though in the latter case it was only a very fleeting glimpse. This smaller, but still relatively 'chunky', Hawker Dragonfly is on the wing rather earlier than its con-familials, emerging in May. Reports, and my own experience, suggest that it favours linear features, so look out for it over ditches that have a clear flyway uninterrupted by too much overhanging vegetation.



Hairy Dragonfly photographed by Chris Rose in Hertfordshire.

**Southern Hawker (*Aeshna cyanea*)** – Although a relatively large species, it breeds in well-vegetated small ponds, often in gardens, from which a surprisingly large number of individuals can emerge. My brother has it in his pond in Crayford, near the Manor House. It can also be found hunting in open areas in woodland, away from water, like the glade in the south-west corner of Franks Park, Erith, where I saw one in July 2012. Found at Foots Cray Meadows in 2014 by Ian Stewart and Ralph Todd. Recorded for the first time at Crossness by myself in 2015, when a single specimen was photographed. I also saw one on a hedge by the footpath from St. Mary's churchyard, Old Bexley, to Churchfield Wood.

**Brown Hawker (*Aeshna grandis*)** – Breeds in still or slow-flowing water, including ponds of modest size. Besides laying eggs in vegetation, it will also lay them on submerged pieces of wood. Will hunt some distance from water bodies. More tolerant of polluted water than other species. Recorded on the lower Cray along Byway 105, the River Wansunt at Thames Road Wetland, Crossness, Danson Park and Foots Cray Meadows. Added to the Lamorbey list by Ian Stewart in August 2015.

**Migrant Hawker (*Aeshna mixta*)** – Used to be found in the UK only as a migrant, but now resident, common and increasing its range. Breeds in fairly still water. Can be found on the lower Cray, Crossness, Danson Park, Foots Cray Meadows and elsewhere. Added to the Lamorbey list by Ian Stewart in August 2015. It is not aggressive to others of its kind and can be found flying in groups, such as along the margin of Bursted Woods in late summer. I counted some 40 to 44 individuals on the Southern Marsh part of Erith Marshes on the afternoon of September 11<sup>th</sup> 2015. Likely to be the only Hawker still on the wing in November.

**Emperor Dragonfly (*Anax imperator*)** – Mainly seen flying strongly over larger, well-vegetated waterbodies, and does not often land – though I have seen it come down away from water at both the margin of Bexley Park Woods and on Slade Green Recreation Ground. Crossness, Lesnes Abbey ponds, Lamorbey Lake, Thames Road Wetland, Danson Park and Foots Cray Meadows are sites that host this species, which is the largest of the UK's Dragonflies.



Male Emperor Dragonfly at Foots Cray Meadows.  
Photo Ralph Todd.

## Libellulidae - Chasers, Skimmers and Darters

**Broad-bodied Chaser (*Libellula depressa*)** – A common UK species that is quick to colonise new ponds. However, I have only occasionally seen it in Bexley, including at Thames Road Wetland, on the River Wansunt by Stanham Farm, at Moat Lane on Crayford Marshes, at Lesnes Abbey ponds, at Crossness and away from water on the heathland in Lesnes Abbey woods. John Turner reported it from Danson Park in 2014, and I saw a single male here in May 2015.



Male Broad-bodied Chaser at  
Foots Cray Meadows, photographed  
by Ralph Todd



**Four-spotted Chaser (*Libellula quadrimaculata*)** – A regionally important species in both east (VC15) and west (VC16) Kent, with some previous records in the upper reaches of the Cray and Darent valleys. The 2009 Kent atlas shows a record for the Crossness area of presence only, which could pre-date the original 2001 version of the book. I recorded what were probably two different, fresh individuals, on the new ‘teapot’ pond halfway along the northern margin of the Southern Marsh on June 19<sup>th</sup> 2015, which is suggestive of on-site breeding rather than adults flying in earlier in the year. It may have been present somewhere else at Crossness and gone unrecorded for some time, or have been attracted by the new waterbody. It is tolerant of brackish water. In 2014 it was found at Foots Cray Meadows by Ian Stewart and Ralph Todd. Ian has also reported it from Crayford Marshes in 2015.



Four-spotted Chaser  
photographed by Ralph Todd  
at Foots Cray Meadows in  
2014.



Four-spotted Chaser at Crossness  
Southern Marsh in June 2015.  
Photo: Chris Rose.

**Black-tailed Skimmer (*Orthetrum cancellatum*)** – This species likes open water with bare patches of ground along the margin where males will frequently rest between bouts of patrolling. Can be found in good numbers at Crossness and Danson Park, and in small numbers at Thames Road Wetland, all sites that have areas with these characteristics. Ian Stewart and Ralph Todd recorded it at Foots Cray Meadows in 2014. I found a single individual at Hollyhill in the summer of 2015. There is sometimes standing water at the bottom of the hill where the Streamway rivulet has been buried under the road and houses.



Ralph Todd took this photo of a male Black-tailed Skimmer at Footh Cray Meadows. Males typically take up positions on bare ground at the margins of waterbodies.

**Ruddy Darter (*Sympetrum sanguineum*)** – Often uses still, weedy water bodies in woodland. Appears to be rather uncommon in Bexley, and I have seen just one definite, at Footh Cray Meadows, and a possible at two other locations. Reported from Crossness. Ian Stewart says he saw one in King George’s Park, Sidcup, on 29<sup>th</sup> August 2015.

**Common Darter (*Sympetrum striolatum*)** – Probably the most numerous Dragonfly in Bexley, using small ponds and other still, even stagnant or brackish water. Often disturbed from resting spots on bare ground, wooden fences and even the tops of garden canes. Can be seen flying into early winter. Frequent along By-way 105 on the lower Cray in season, and can be seen at Danson Park, Footh Cray Meadows and elsewhere. Several pairs were in tandem and ovipositing at the Hall Place flood overflow channel in 2016. It was always likely to occur at Lamorbey lake, and on 23<sup>rd</sup> August 2016 two were recorded here by myself. Away from water, it can be found at the ‘wildlife rough’ on the north side of Barnehurst Golf Course.

## Damselflies - Zygoptera

### Demoiselles - Calopterygidae

**Banded Demoiselle (*Calopteryx splendens*)** – Common along lowland streams and rivers. A exotic-looking species that can be seen on the Cray and Shuttle.

Karen Sutton saw a Banded Demoiselle Damselfly at Crossness on the afternoon of June 10<sup>th</sup> 2016, which as Site Manager she believes is a first for Erith Marshes. This would appear to be correct. The species has a preference for slow-moving rivers and streams, but does appear prone to wandering away from these. It is conceivable that this one flew/blew over from Essex given the north-easterly winds earlier that week. I have seen a wandering male at Danson Park lake and Ralph Todd reports having it in his garden near The Warren in Bexleyheath.



Male Banded Demoiselle.  
Photo Chris Rose.



Female Banded Demoiselle.  
Photo Ralph Todd.

## Coenagrionidae - Red and Blue/black damselflies

**Azure Damselfly (*Coenagrion puella*)** – Appears to be more widely distributed than the similar-looking Common Blue, on account of its utilisation of a broader range of habitats in the Borough, including garden ponds. Wanders away from water and I have found it in gardens and back alleyways. Likely to crop up at any waterbody in Bexley, it can be found at sites including Lamorbey Lake, on the rivers Cray and Shuttle, Thames Road Wetland, Crossness, Danson Park, and Foots Cray Meadows.

**Common Blue Damselfly (*Enallagma cyathigerum*)** – In Bexley it favours larger waterbodies, and can thus be found in good numbers at Danson Park lake, Lamorbey lake, Foots Cray Meadows, also at Crossness. A single male has been recorded at Thames Road Wetland.

**Red-eyed Damselfly (*Erythromma najas*)** – Locally common in the south-east of England. Males like to sit on Water Lilly leaves defending territory, but will use other floating plants such as Amphibious Bistort. Present at Lamorbey Lake, Sidcup, in 2012, where it was using waterlily leaves. I then found it at Danson Park lake (the Kent atlas indicating it has been present since before 2009) and the lake at Foots Cray Meadows in 2013, in both cases using floating mats of algae.

**Small Red-eyed Damselfly (*Erythromma viridulum*)** – A recent UK colonist, first found in 1999, since when it has spread rapidly throughout south-east England and has reached Devon and North Yorkshire. I found it utilising floating mats of algae on Danson Park lake in 2013. Kitted out in waders for a Danson lake clean-up organised by Friends of the Shuttle, I was able to get close to very large numbers of these insects in 2014 as they again sat on algal mats, many in tandem and saw them ovipositing. It may have arrived in Bexley quite recently, as it post-dates the 2009 Kent atlas, and clearly benefits from the algal problem, which the Council endeavours to clear with a special 'boat'. Found at Crossness for the first time on July 4<sup>th</sup> 2015 by myself and Mick Massie when leading a London Natural History Society event. The species was flying in substantial numbers at both the board-walked 'teapot' pond, and the wader scrape at the east end of Southern Marsh, and was also mating, suggesting pioneer individuals probably showed up here last year, but went unnoticed.

**Blue-tailed Damselfly (*Ischnura elegans*)** – A common species that may be the only one present in polluted waters. Can be seen along the Cray, including at Foots Cray Meadows and Thames Road Wetland, on the river Shuttle, at Danson Park and Lamorbey lakes and Erith Marshes and probably elsewhere. I have had it in my garden in Barnehurst, north of the railway station.





Blue-tailed Damselfly, clearly showing the bi-coloured pterostigma in this species (the small coloured cell towards the tip of the wings). Photo Ralph Todd.

**Large Red Damselfly (*Pyrrhosoma nymphula*)** – Although a widespread and common species in the UK, there is limited data from Bexley, and it has probably been under-recorded in the Borough. It is one of the first species to emerge as an adult in the spring, and may be seen as early as mid-April. I have recorded it on the River Cray, at Thames Road Wetland, Lesnes Abbey ponds, Lamorbey Lake and Longlands allotment site in Sidcup and Churchfield Wood near the A2. In April 2015 I found two newly-emerged individuals on Flag Iris leaves at the margin of Danson lake by the wildlife area, which was a new site record. A few days later Martin Petchey imaged some at Crossness, confirming earlier data in the Kent Dragonfly Atlas.



Female Large Red Damselfly photographed by Martin Petchey at Crossness in April 2015.



## Lestidae - Emerald damselflies

**Willow Emerald (*Chalcolestes viridis*)** – Only twice reported from the UK prior to 2007, but from then on gained a foothold in East Anglia and was still spreading in 2014 and 2015 by which time it was in Essex, north Kent, South West London, Surrey and West Sussex, but not East Sussex or southern Kent. Somewhat inconspicuous as an adult, it lays its eggs on tree trunks overhanging the water, leaving distinctive long-lasting marks. Searches on Willow at Thames Road Wetland and at Crossness in early 2015 and at the latter site in late 2015 failed to locate any signs of egg-laying, however.

Data from around the country indicated further significant range expansion in 2016, and on 6<sup>th</sup> September Ian Stewart saw at least 5 at Ruxley Gravel, just over the Bexley border, including a pair mating and ovipositing in the trees. He managed to get a good photograph of one. From this the identification, and status as the first record of the species in the London Borough of Bromley was confirmed by the London Natural History Society Odonata recorder Neil Anderson.

On September 24<sup>th</sup> 2016 Ian saw and photographed the first known Willow Emerald Damselfly for Bexley, a male, at Footscray Meadows, not far downstream from Ruxley.



Bexley's first known Willow Emerald Damselfly, photographed at Foots Cray Meadows by Ian Stewart on 24<sup>th</sup> September 2016.

Despite the overcast and breezy conditions, both a male and a female Willow Emerald Damselfly were then seen at Foots Cray Meadows on 27<sup>th</sup> September by Chris Rose and Wren Rose. These were the second and third sightings in Bexley. With both sexes present, there is a chance the species can establish itself at the Meadows and might be seen here in modest numbers in 2017. Other sites in Bexley should also be watched. Wren and Chris were on a targeted search following Ian's sighting, and struck lucky, spotting a lone specimen on a rush leaf by one of the newish ponds, moments after arriving. The partly out-stretched wings immediately identified it as an Emerald of some sort, and the pale brown wing spots were easily seen from the right angle. Intent on getting a photo, insufficient attention was paid to the sex, and it soon flew off out of sight. Although the photos of this individual were somewhat blurred, later magnification showed that it was female.

A male was spotted at one of another pair of ponds some distance away, by standing under an overhanging Willow and looking up at the branches. Fortunately it was in an ideal position for photography, and several crisp pictures were taken by Wren. It repeatedly took off from the twig, hovered briefly and then landed back in the same place before eventually moving on.



Male Willow Emerald Damselfly  
at Footscray Meadows, 27<sup>th</sup>  
September 2016, photographed  
by Wren Rose.

**Emerald Damselfly (*Lestes sponsa*)** – A locally common species in Britain and Ireland. It has been recorded at both Erith and Crayford Marshes (Kent atlas), but I have yet to find it myself, nor have any of my several Crossness contacts seen one. GiGL had an unverified 2003 record from Foots Cray Meadows, but in 2014 Ian Stewart managed to take a rather fuzzy mobile phone camera image of one here. It was sent to Neil Anderson the London Natural History Society Odonata recorder for a second opinion and the photograph proved adequate to confirm this species.

## **SOME OTHER SPECIES TO LOOK OUT FOR - THOUGH THERE ARE NO KNOWN OR VERIFIED RECORDS FROM BEXLEY TO DATE**

Since the mid 1990s seven species have appeared in Britain for the first time, and four more thought to have become extinct or for which there were only a handful of historic records have reappeared. A number of other species are predicted to colonise from the continent in the near future.

**Southern Migrant Hawker (*Aeshna affinis*)** – This recent arrival pitched up in the UK in 2010 on the North Kent Marshes, and has been seen at Hadleigh Country Park, Benfleet, Essex. A few adults were seen in 2011, suggesting breeding and its fate here remains in the balance. The species was seen at locations in southern Essex in 2012, with one turning up at RSPB Rainham on 4<sup>th</sup> September where it was also seen in 2014. Reported to have had a good year in its greater Thames estuary strongholds in 2015. Some indications of possible range expansion in Essex during 2016. Amongst other distinguishing features the male has more uniformly blue eyes than the similar Migrant Hawker, but could easily be confused with that species and thus overlooked .

**Lesser Emperor (*Anax pathenope*)** – Has started to breed in east Kent and was seen at Rainham in 2016.

**Dainty Damselfly (*Coenagrion scitulum*)** – Believed to have been rendered extinct in the UK due to the floods of 1952/3, it was found breeding at Sheppey in Kent in 2010 and was breeding there in 2013. Still present in the county in 2015. It appears to favour shallowish ponds with floating or submerged vegetation.

**Southern Emerald (*Lestes barbarus*)** – Seen in Essex in 2010 and 2011. Bred at Cliffe in 2011 and still present in 2015. Will tolerate brackish conditions.

**White-legged Damselfly (*Platycnemis pennipes*)**. Uncommon, though can be locally abundant in suitable habitat in southern England. Favours slow-flowing streams and rivers, sometimes found at canals and ponds. Ian Stewart has reported that he may have seen this species at Foots Cray Meadows in 2014. The nearest previous records for it to Bexley are half way up the River Darent.

The Norfolk Hawker has started to breed in east Kent. The Red-veined Darter appears as a migrant in Britain in most years, but in small numbers, sometimes establishing colonies. The Kent atlas has no records of this species for West Kent, only the east of the county.

## **ODONATA HOTSPOTS IN THE LONDON BOROUGH OF BEXLEY**

With the exception of Crayford Marshes, which may have a good Odonata fauna, but where the waterbodies are largely inaccessible to the public, the best sites are all fully open to the public. Where 'Kent Atlas data' is cited, this indicates that there has not been a sighting by myself, or recent records from other observers.

### **1). ERITH MARSHES (CROSSNESS, SOUTHERN MARSH)**

17 species:

Hairy Dragonfly  
Brown Hawker  
Migrant Hawker  
Southern Hawker  
Emperor Dragonfly  
Broad-bodied Chaser  
Four-spotted Chaser  
Black-tailed Skimmer  
Common Darter  
Ruddy Darter (Kent Atlas data)

Banded Demoiselle Damselfly  
Azure Damselfly  
Common Blue Damselfly  
Blue-tailed Damselfly  
Small Red-eyed Damselfly  
Large Red Damselfly  
Emerald Damselfly (Kent Atlas data - continued presence needs checking as no recent records)

## **2). FOOTSCRAY MEADOWS**

I recorded 10 species here on 9<sup>th</sup> August 2013. 2014 records from Ian Stewart and Ralph Todd and the Willow Emerald arrival of 2016 have taken the total to 16:

Southern Hawker  
Brown Hawker  
Migrant Hawker  
Emperor Dragonfly  
Broad-bodied Chaser  
Four-spotted Chaser  
Black-tailed Skimmer  
Ruddy Darter  
Common Darter

Banded Demoiselle  
Azure Blue Damselfly  
Common Blue Damselfly  
Red-eyed Damselfly  
Blue-tailed Damselfly  
Willow Emerald Damselfly  
Emerald Damselfly

## **3). DANSON PARK**

I have personally recorded 13 (possibly 14) species here from 2013 to spring 2015:

Brown Hawker  
Migrant Hawker  
Emperor Dragonfly  
Broad-bodied Chaser  
Black-tailed Skimmer  
Common Darter

Possible Ruddy Darter

Banded Demoiselle  
Azure Damselfly  
Common Blue Damselfly  
Red-eyed Damselfly  
Small Red-eyed Damselfly  
Blue-tailed Damselfly  
Large Red Damselfly

Southern Hawker should be a possibility.



#### **4). THAMES ROAD WETLAND**

I have recorded the following 12 (possibly 13) species here since the spring of 2010:

Banded Demoiselle Damselfly  
Azure Damselfly  
Common Blue Damselfly – so far only a single male, seen in 2013  
Blue-tailed Damselfly  
Large Red Damselfly

Hairy Dragonfly  
Brown Hawker Dragonfly  
Migrant Hawker Dragonfly  
Emperor Dragonfly  
Broad-bodied Chaser Dragonfly  
Black-tailed Skimmer Dragonfly  
Common Darter Dragonfly

Possible female Ruddy Darter.

Algal mats on the 'lake' suggest that Red-eyed and/or Small Red-eyed should be possible in due course.

#### **5). LAMORBEY LAKE**

The species list has doubled from 5 to 10 during 2015, thanks to observations by Ian Stewart. Common Darter in 2016 takes it to 11:

Brown Hawker  
Migrant Hawker  
Emperor Dragonfly  
Broad-bodied Chaser  
Common Darter

Banded Demoiselle Damselfly  
Azure Blue Damselfly  
Common Blue Damselfly  
Red-eyed Damselfly  
Blue-tailed Damselfly  
Large Red Damselfly

#### **ESSENTIAL READING**

The leading field guides to British Odonata are:

Field Guide to Dragonflies and Damselflies of Great Britain and Ireland. By Steve Brooks and Steve Cham. With colour plates by Richard Lewington. 2014 edition fully revised and updated. (British Wildlife Publishing).

Britain's Dragonflies by Dave Smallshire and Andy Swash. Third Edition, fully revised and updated, 2014. Principally illustrated with colour photographs. (WILDGuides).