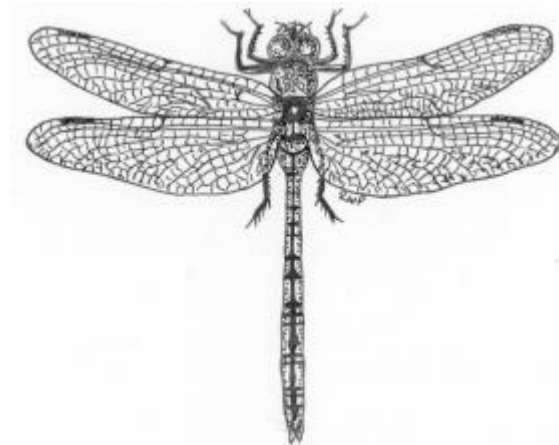


DRAGONFLIES SPECIES ACTION PLAN

1. INTRODUCTION

This generic species action plan recognises the role dragonflies play as an indicator of the general health of aquatic habitats. Dragonflies are a more visible example of the insect world and so they have an important role in making biodiversity more accessible to the wider public. The southern damselfly (*Coenagrion mercuriale*) is the only UKBAP priority species³⁹, which has not been recorded in Caerphilly county borough, although it has been recorded at one site in neighbouring Rhondda Cynon Taff county borough. The species included within this SAP are:

- **Azure damselfly** *Coenagrion puella*
- **Banded demoiselle** *Calopteryx splendens*
- **Beautiful demoiselle** *Calopteryx virgo*
- **Black darter** *Sympetrum danae*
- **Black-tailed skimmer**
Orthetrum cancellatum
- **Blue-tailed damselfly** *Ichnura elegans*
- **Broad-bodied chaser** *Libellula depressa*
- **Common blue damselfly**
Enallagma cyathigerum
- **Common darter** *Sympetrum striolatum*
- **Common hawk** *Aeshna juncea*
- **Emerald damselfly** *Lestes sponsa*
- **Emperor** *Anax imperator*
- **Four-spotted chaser**
Libellula quadrimaculata
- **Golden-ringed dragonfly**
Cordulegaster boltonii
- **Hairy dragonfly** *Brachytron pratense*
- **Keeled skimmer** *Orthetrum coerulescens*
- **Large red damselfly**
Pyrrosoma nymphula
- **Migrant hawk** *Aeshna mixta*
- **Ruddy darter** *Sympetrum sanguineum*
- **Scarce blue-tailed damselfly**
Ichnura pumilio
- **Southern hawk** *Aeshna cyanea*



dragonfly

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damselfly

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2. CURRENT STATUS

2.1 UK and Wales

There are 39 species of dragonfly known to breed in Great Britain and Ireland. Wales has a breeding assemblage of 28 species²³ with several others that have been recorded as migrant visitors. A number of species have a significant proportion of their national populations within Wales²³, including the southern damselfly, beautiful demoiselle, and golden-ringed dragonfly. Both the scarce blue-tailed damselfly and the keeled skimmer also exhibit a Welsh bias in their distribution.

It is difficult to outline precise habitat descriptions for many species, as they are not yet fully understood. Some dragonfly species utilise a wide range of wetland habitats whilst others have more specific requirements. Species on the edge of their climatic range tend to be more particular in their habitat requirements than when they are in the middle of their range. This leads to a much more scattered distribution as they reach the edge of their range. Dragonflies may also occupy different habitats in various parts of their range. A general outline of wetland habitats is given below, but it is important to bear in mind the dangers in making generalisations about the habitat requirements of dragonfly species. This has implications for the management of breeding sites.

- ❖ **Lowland rivers:** Potentially a rich dragonfly habitat, although frequently subjected to inappropriate river management and the influx of huge inputs of nutrients from farm run-off and sewage works which greatly reduces its dragonfly fauna (*banded demoiselle*)
- ❖ **Streams and upland rivers:** These tend to be poor habitats for dragonflies. The hard stony substrate and lack of submerged aquatic plants tend to make these watercourses unsuitable for larvae (*golden-ringed dragonfly, southern damselfly, beautiful demoiselle*)
- ❖ **Bogs, moorland and lowland wet heath:** These support the most diverse dragonfly assemblages, with both generalist species as well as specialist species breeding (*common hawker, keeled skimmer, scarce blue-tailed damselfly*)
- ❖ **Fens and grazing marshes:** Sluggish rivers and ditches criss-crossing fields are important dragonfly habitats, although not particularly common with Caerphilly county borough (*hairy dragonfly, ruddy darter*)
- ❖ **Ponds:** Ordinary farm and garden ponds are important for the commonest dragonfly species. Farm ponds in the open countryside and garden ponds within urban areas provided they are managed correctly can support the common species as well as helping the spread of some of the more notable species (*black-tailed skimmer, migrant hawker, broad-bodied chaser, emperor, southern hawker, common darter, red-eyed damselfly, common blue damselfly, blue-tailed damselfly*)
- ❖ **Woodland ponds:** As long as they are not too heavily shaded and have a good range of aquatic plants, ponds within deciduous woodland can attract a range of species (*emerald damselfly, large red damselfly, southern hawker*)

2.2 Caerphilly County Borough

Like most invertebrate families there is a lack of records of dragonfly species from within Caerphilly county borough. Records that do exist tend to be for adult dragonflies, which may be of little help in locating breeding populations. There is also a tendency for records to reflect recording effort rather than the actual distribution of the species. Of the number of species recorded within Caerphilly county borough several can be considered widespread. Other species are restricted because they are at the edge of their UK range or because there is a lack of specific habitat, or both.

Those dragonflies considered **widespread** are: azure damselfly, banded demoiselle, blue-tailed damselfly, broad-bodied chaser, common blue damselfly, common darter, common hawker, emerald damselfly, emperor, golden-ringed dragonfly, large red damselfly and southern hawker.

Those with a more **restricted** distribution are:

Species	Habitat	Range	Limited by	Rare / Scarce ²⁴
Beautiful demoiselle	Fast-flowing clean, pebble- or sand-bottomed streams, often moorland	-	Habitat	-

Species	Habitat	Range	Limited by	Rare / Scarce ²⁴
Black-tailed skimmer	Lakes and slow rivers with exposed marginal areas, sometimes marshes and small ponds	Edge	Range	-
Black darter	Shallow, acidic nutrient poor pools with abundant emergent vegetation on heathland, moorland and bogs	Edge	Range	-
Four-spotted chaser	Wide range including heathland and moorland bogs	Edge	Range	-
Hairy dragonfly	Clean, well vegetated ditches and dykes	Scattered	Range	✓
Keeled skimmer	Small rivers and streams, ditches and pools in acid-peat regions, usually where there is <i>Sphagnum</i> moss	Edge	Range	-
Migrant hawk	Various but not acidic heathland ponds	Edge	Range	-
Ruddy darter	Shallow well vegetated ponds	Edge	Range	-
Scarce blue-tailed damselfly	Shallow water with little vegetation – valley mires, spring fed seepages or shallow pools in areas of active working	Edge of range	Habitat	✓

The following SINC in Caerphilly county borough have been identified with dragonfly interest⁸:

- 3: **Tair Carreg Moor** – 4 ponds as part of the site important for dragonflies including the common hawk and large red damselfly.
- 9: **Cefn Gelligaer** – a series of ponds on an area of reclaimed colliery spoil
- 61: **Valentec Nature Reserve** – pond on site which is of value for dragonflies
- 115: **Pwllgwinau** – deep pond supporting a wide variety of invertebrates, including the emperor dragonfly and damselfly species.
- 126: **Maesycwmmwr Meadows** – farm pond with a marshy margin as part of the site, important for breeding toads and dragonflies.
- 129: **Mynydd Dimlaith and Cwm-y-Bwch** – important for aquatic invertebrates, probably including dragonflies.

Any site within Caerphilly county borough with an assemblage of 15 or more breeding dragonflies would be notable and would qualify for consideration for SSSI notification²⁴.

2.3 Links with Habitats

Although primarily associated with wetlands, consideration must also be given to other habitats on account of the role that hinterland plays in the adult stages of their lifecycle. Therefore, whilst this SAP should be read in conjunction with the wetland habitat statement/action plans, many of the others will be relevant where they co-exist with wetlands.

- **Wetlands**
- *Deciduous Woodlands* (rides and glades)
- *Wildlife Corridors* (hedgerows)
- *Species-rich Grasslands*
- *Common Land*
- *Heathland*
- *Post-Industrial Land*
- *Urban* (garden ponds)

3. CURRENT FACTORS AFFECTING THE SPECIES

- A lack of detailed understanding of dragonfly habitat requirements.
- The absence of management can lead to natural successional change and the loss of habitat, particularly for shallow pools favoured by many species due to the warmer water.
- The loss or destruction of habitat due to changes in land use is a significant factor in declining dragonfly numbers. Not only may the aquatic habitat be lost but also the loss of hinterland habitats such as heath, scrub and grassland can have a significant effect even where the pond has been protected.
- Changes in water level through improved drainage schemes, fluctuating water levels within water bodies and the general lowering of water tables can all affect dragonfly habitats.
- River improvement schemes which create steep banks and deep straight watercourses, adversely affecting riverine species.
- Excessive clearance of aquatic and bankside vegetation or other unsympathetic management regimes.
- Pollution and fertiliser run-off.
- Afforestation resulting in over-shading and draw down in water tables, leading to wetlands drying up.
- Overstocking of fish, and some waterfowl.

4. CURRENT ACTION

- 4.1 In the absence of any of the species of national importance dragonflies tend to be regarded as part of the wetland fauna and managed as part of that diverse group. There is no specific management for dragonflies at present in Caerphilly county borough.
- 4.2 The County Dragonfly recorders for Glamorgan and Gwent maintain records.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the diversity of dragonfly species within the county borough (Target: ongoing).
- 5.2.2 Improve knowledge of species within the county borough listed as rare in Great Britain (Target: 2010).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect existing important breeding sites.	EA	CCW NAWAD WDA CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of dragonflies when reviewing agri-environment schemes.	CCW	NAWAD BDS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Protect important sites containing significant assemblages of breeding dragonflies when considering any proposal of development and where appropriate, use planning conditions to protect habitats.	CCBC	EA CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.4 Seek to designate important breeding sites containing either significant assemblages or UK priorities as SINC, SSSIs or LNRs.	CCBC	CCW GWT GLWT									✓
6.2 Site Safeguard and Management											
6.2.1 Ensure important sites are managed appropriately.	CCBC	GWT GLWT landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Develop individual SAPs for species considered important within Caerphilly county borough.	CBP	-	✓	✓	✓						
6.4 Advisory											
6.4.1 Advise landowners on the appropriate management of water bodies for dragonfly requirements.	CCBC	GWT GLWT BDS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Advise landowners of the role <i>hinterland</i> plays in dragonfly conservation.	CCBC	GWT GLWT BDS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Monitor dragonfly populations in the county borough to improve baseline data and monitor trends.	BDS	(CBP)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Support the setting up of an LRC as a central database for information.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.3 Develop recording based on the tetrad grid system.	CBP	BDS		✓	✓	✓					
6.6 Communications and Publicity											
6.6.1 Increase general awareness of dragonflies through publicity and events.	CBP	BDS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Use dragonflies to promote awareness of the importance of wetland habitats.	CBP	BDS	✓	✓	✓	✓	✓	✓	✓	✓	✓