

Eye-D

Southern Damselflies

Status and Distribution

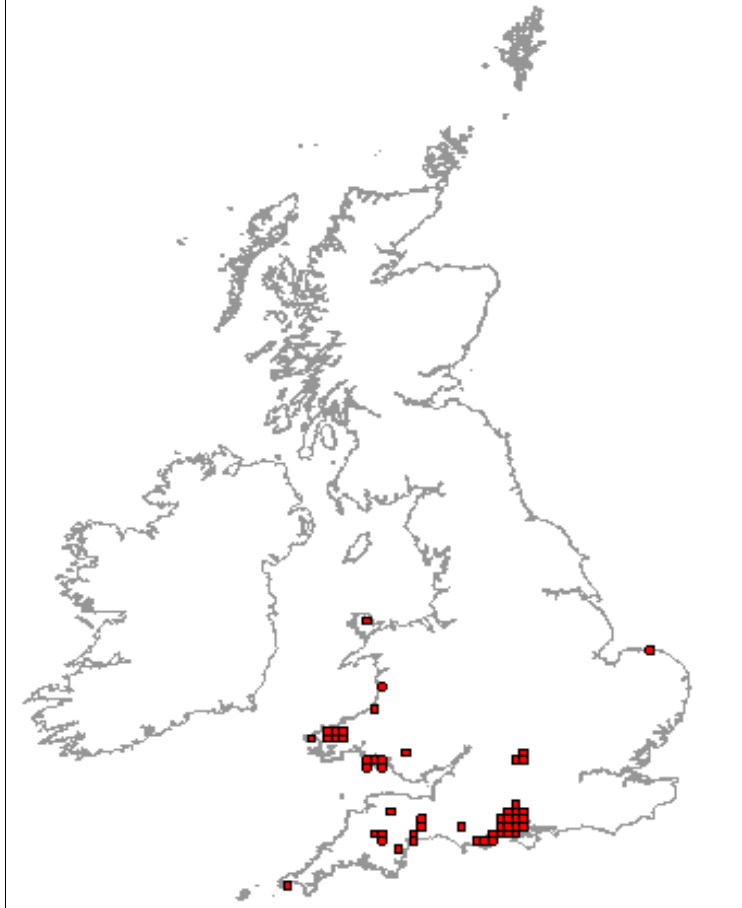
The Southern damselfly (*Coenagrion mercuriale*) is a rare species in the UK. Although on the extreme north-western fringe of its European range, it is believed that up to 25% of the global population of this species occurs in the UK. Its two main strongholds are in the New Forest and in the Preseli mountains in Pembrokeshire. Smaller colonies are found in Devon, Dorset, Anglesey, Gower, Oxfordshire and on the flood plains of the Test and Itchen rivers in Hampshire. There are old records from Cornwall and Somerset and elsewhere in Devon, Dorset and South Wales.

Although the range of the species has contracted in the last thirty years, and we don't know of any historic records in Sussex, changing weather patterns may encourage the species to migrate across our borders in the next few years. At least it's worth keeping an eye out anyway !

The Southern damselfly has also vanished or is on the edge of extinction in 7 countries along the northern boundaries of its distribution (Belgium, The Netherlands, Luxembourg, Slovenia, Romania, Poland, Austria) and is declining in 3 others (UK, Germany, Switzerland).

This species is protected under Schedule 5 of the 1981 Wildlife and Countryside Act, which protects it against a variety of factors including killing or selling of individuals and damage or destruction of habitat. In Great Britain it is classified as Rare (category 3) on the Red Data Book List, and it is a British Dragonfly Society "Key Species". It is also listed in Appendix II of the Berne Convention and Annex II of the EC Habitats Directive, Under EC Regulations sites can be proposed as internationally protected areas because of the presence of Southern damselflies. There are now more than 10 candidate Special Areas of Conservation (SACs) in the UK with one of the qualifying criteria being the presence of Southern Damselfly.

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Southern Damselfly Eye-D Continued

Southern damselfly habitat

In the UK the Southern Damselfly is mostly found in base-rich fens and streams, often within acid heathland areas. However, it does also occur on water meadows in the floodplains of two chalk rivers in Hampshire, a habitat said to be more typical of many continental sites. At breeding sites the water is typically shallow and slow-flowing over a gravel or marl bed with patches of organic detritus. Its possible that a more or less constant, water temperature in winter in the spring-fed sites is particularly important.

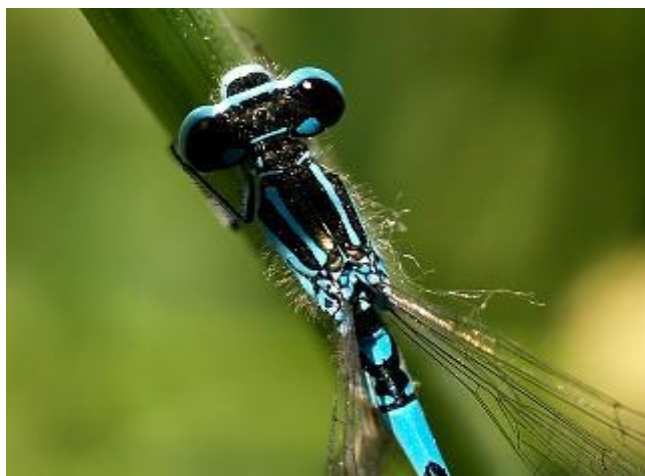


Description

The Southern Damselfly is one of five members of the genus *Coenagrion* found in the British Isles (two others have gone extinct in the last 40 years). It is one of eleven members of the family *Coenagrionidae*. Together with Common Blue Damselfly (*Enallagma cyathigerum*) and White-legged Damselfly (*Platycnemis pennipes*), the *Coenagrion* species constitute the blue damselflies, which are all blue and black in colour.



Male Southern Damselflies can only be identified from their anal appendages, though the mercury mark on the second abdominal segment is a useful guide (picture right). Their flight is weak and low.



Southern damsel, *Coenagrion mercuriale* © M Aben (Right) & Fturmod (Left)

Southern Damselfly Eye-D Continued

Breeding and dispersal

Adults are on the wing from mid May to August. They stay close to the breeding site and do not appear to disperse easily to colonise new areas. Low shrubs and *Juncus* spp. are used for perching, roosting and feeding forays. Eggs are laid in submerged tissues of aquatic and emergent vegetation and the plant dwelling larvae usually take two years to mature. The larvae are distinctive in that they have very small, un-patterned caudal lamellae.

Things you might get the Southern Damselfly mixed up with!

Unfortunately, this species is easily confused with the other members of the genus *Coenagrion* and with the Common Blue Damselfly [*Enallagma cyathigerum*](#). Female *Coenagrion* species are very similar making them difficult to distinguish from each other.



Below: Common Blue Damselfly, *Enallagma cyathigerum* © D Chelmick

Above: Azure damsel, *C puella* © H Matcham



Left:

Variable damselfly,

C pulchellum

© G Jarvis

Southern Damselfly Eye-D Continued

Things that might help you tell the difference between species!

Southern Damselfly is quite small compared with similar species and will only fly in full sunshine in the hottest part of the day.

Threats to Southern Damsels

The main factor thought to be influencing the decline of the species is its inability to disperse long distances. It is thought that it likes open vegetation at its breeding sites, so the removal of grazing animals may have a negative impact in some instances. Other threats include drought, abstraction of water leading to a lowering of the water table, drainage for agriculture and forestry, and nutrient enrichment from farm and urban run-off. In Sussex, our lack of true fen habitats and interconnected wetlands with a pure water source may well be the reason for its absence. It is so tantalisingly close however in Hampshire, that there is just a smidgen of a chance that one day it might stray, or get blown across our border, so keep your eyes peeled, you never know when you might get lucky!



Huge amounts of wetland habitat and river restoration work have been carried out in the New Forest over the last ten years — will it be this or changing climate patterns which tempts the Southern damsel across our borders? or will it disappear from its Hampshire range too despite conservation efforts