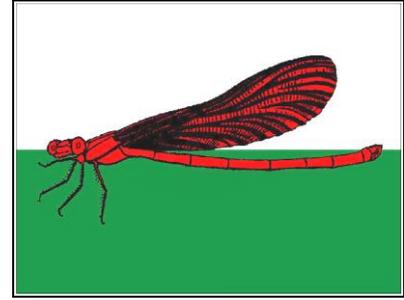


## Y Fursen

North Wales  
Dragonfly  
Newsletter  
No. 90

11<sup>th</sup> December 2016



### Odonata news and events from across the vice counties of Anglesey, Merionethshire, Caernarvonshire, Denbighshire and Flintshire



Hi all,

#### Acknowledgments

My thanks go to those listed below who have sent me dragonfly records during 2016. They are listed in no particular order:

Duncan Brown, Eddie Urbanski, Steve Stansfield, Gareth Jones, Dick Eastwood, James Robertson, John Smith, Mike McCarthy, Dylan Edwards, Jim Clark, Margaret Thomas, Margery Griffin, Eileen Carol, Emma Broad, Russ Sheaf, Norma Smethills, Paul Hope Malcolm Watling, Adrienne Stratford, Sue Loose, Alun Williams, Peter Heywood, Anna Williams, Rhiannon Cottrell.

#### Dragonflies used in water management

Thanks go to Genevieve Dalley for this news.

A new book by two Stellenbosch University researchers allows conservationists, water managers and farmers in South Africa to assess water quality using the country's 162 dragonfly and damselfly species (see: <http://www.bizcommunity.com/Article/196/356/148529.html>)

The book is freely downloadable with an easy-to-use index. It takes three main features of each of the South African species into account assigning scores to each species. These can be weighed up when comparing the state of different water sources. The book also works as an ID guide for the stunning species found in South Africa. Co-author, Dr Simaika, says: "Books such as this one are a great starting point for getting people to care about something. If only one in ten readers were to think more deeply about freshwater conservation, then we will have done a good job," he adds: "I hope it will also encourage people already working in the water sector, particularly in the water resource arena, to think differently about freshwater biodiversity conservation, which all too often takes a back seat to providing water for human uses."

#### All you need to know about the Mercury Bluet (or Southern Damsel)

Earlier this year it was decided by the Dragonfly Conservation Group that a management handbook for *Coenagrion mercuriale* (Mercury Bluet) would be a useful thing to produce. Genevieve Dally, Conservation Officer for the British Dragonfly, has done just this and the

final product was released on the 8<sup>th</sup> December. It is free to download the 37MB pdf handbook by following the link up to the 15<sup>th</sup> December: <https://we.tl/OS6uxBvqr1>  
The document can also be found on the BDS website at: <http://www.british-dragonflies.org.uk/species/southern-damselfly>

### **North Wales's former arctic dragonflies?**

Last July I was fortunate enough to search for some of the northernmost species of dragonflies during a post-conference ECOO field trip into arctic Sweden and Finland. There is no shortage of watery dragonfly habitats in this vast taiga wilderness; conifer and birch forests with countless rivers and acid bog lakes stretching for mile after mile. To get a rough idea of the size of the place I was amazed to find that the flight from Stockholm to iron ore town Kiruna, Sweden's northernmost Lapland outpost, is over two thirds that of Manchester to Stockholm!

Most of the odonates found in arctic are unfamiliar to us in North Wales but it is most likely that many bred here for a while as the climate ameliorated and the forests spread northwards at the end of the last ice age.

The region's Odonata belong overwhelmingly to the aeshnid genus *Aeshna* (hawkers), cordulid genus *Somatochlora* (emeralds) and the libellulid genus *Leucorrhinia* (White-faces); there are relatively few damselflies. Gone are our familiar more warm-loving darters, chasers, skimmers and goldenrings, and of course, any emperor. The only familiar species tolerating such cold arctic winters are *Aeshna juncea* (Moorland Hawker), *A. grandis* (Brown Hawker) and the now localised *L. dubia* (Common Whiteface). Of the familiar damselflies only *Enallagma cyathigerum* (Common Bluet) and *Lestes sponsa* (Common Spreadwing) penetrate this northern region and even the latter becomes localised before failing altogether.

Three of the arctic species are still holding on in Scotland, but for how long in a warming climate remains to be seen. These are the lovely blue *Aeshna caerulea* (Azure Hawker), *Somatochlora arctica* (Arctic Emerald) and *Coenagrion hastulatum* (Northern Bluet). In arctic Sweden and Finland they are three of the more common species.



Male *Aeshna caerulea*, Klippiisjarvi, Finland, 19<sup>th</sup> July 2016. Photo A. Brandon.



Female *Somatochlora arctica*, Klippiisjarvi, Finland, 19<sup>th</sup> July 2016. Photo A. Brandon.



*Coenagrion hastulatum* tandem, Piiljarvi, Sweden, 22<sup>nd</sup> July 2016. Photo A. Brandon.  
More northern and unfamiliar European dragonfly species that are completely at home in the chilly arctic bog lakes are *Aeshna subarctica* (Bog Hawker), *Leucorrhinia rubicunda* (Ruby Whiteface), *S. alpestris* (Alpine Emerald) and the circumboreal and little known *S. sahlbergi* (Treeline Emerald). The three *Somatochlora* species seldom land conveniently for photography. The latter is the world's most northern dragonfly species; its colloquial name refers to it breeding in the zone between taiga and tundra. Despite intensive searches we never found an adult except for a dead one. But we found plenty of its exuviae in specific bog lakes and I managed to find one at a completely new Finnish site that was very satisfying.



Male *Aeshna subarctica*, Pajaka, Sweden, 17th July 2016. Photo A. Brandon.



Male *Leucorrhinia rubicunda*, bog lake, Torne River, Sweden, 21<sup>st</sup> July 2016. Photo A. Brandon.



Female *Somatochlora alpestris*, Klippiisjarvi, Finland, 19<sup>th</sup> July 2016. Photo A. Brandon.



Dead male *Somatochlora sahlbergi*, Klippiisjarvi, Finland, 19<sup>th</sup> July 2016. Photo A. Brandon.



In search of *Somatochlora sahlbergi*, the most northerly dragonfly in the world, in arctic Finland. Sweden is just across the valley and mountainous Norway in the background. 19<sup>th</sup> July 2016. Photo A. Brandon.

Only one gomphid just makes it to the freezing arctic torrents: the lovely *Omphiogomphus cecilia* (Green Snaketail).



Female *Omphigomphus cecilia*, Pajaka, Sweden, 17th July 2016. Photo A. Brandon.

The tiny bluet *Coenagrion johanssoni* (Arctic Bluet) was the only damsel, apart from *C. hastulatum* and perhaps *E. cyathigerum*, that was really at home this far north.



Male *Coenagrion johanssoni*, bog near Torne River, Sweden, 21<sup>st</sup> July 2016. Photo A. Brandon.

**Merry Christmas!**

**Allan**

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