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North Wales Dragonfly Newsletter No. 79

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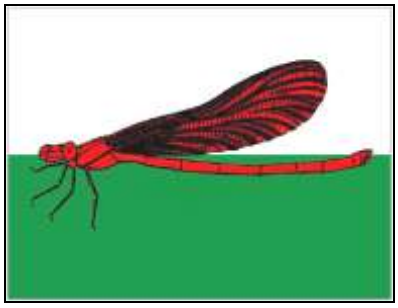

Odonata news and events from across the vice counties of Anglesey, Merionethshire, Caernarvonshire, Denbighshire and Flintshire

Hi all,

Dragonfly recording

In the next few weeks we are going to see our first adult damselflies and dragonflies emerge and it is probably timely to remind you of the importance of sending in records of your observations so that we can get an idea of how our species are faring. There are 5 ways in which you can send in records but **please don't submit them to more than one database**. This would lead to duplication in records that can, in particular, mess up phenological studies. Please note that however you submit your records I will verify them as North Wales Vice County Recorder and they should all finish up on iRecord (see 4. below) within the year. If you are a relative beginner or are uncertain of identification please also send photographs if possible to enable the species to be verified.

Entering dragonfly records can be done in one of these five ways:

1. You are very welcome to continue sending records to me as manager of the North Wales Dragonfly dataset. I would particularly encourage you to send me unusual or rare species sightings so that I can react promptly and notify others by way of this newsletter. In order to simplify what can become a daunting task, I ask you to send your records in an Excel spreadsheet format if possible. An appropriate Excel spreadsheet form can be downloaded from the BDS website: http://www.british-dragonflies.org.uk/content/recording-dragonflies-and-damselflies-british-isles

2. You can send your records to Cofnod, our Local Records Centre. Unfortunately the Cofnod system does not currently allow for adding data to separate life stage columns. Up to now this data has been entered there either in the 'abundance' or 'notes' columns and it is time consuming to extract in the form needed for iRecord

3. If you are a birder you can enter dragonfly records directly online into BTO's Birdtrack: http://www.bto.org/volunteer-surveys/birdtrack/taking-part/recording-your-sightings/recording-dragonflies . The BTO has adopted the same recording criteria as the BDS including that for breeding

4. BTO's Garden Bird Watch scheme also has a facility for entering dragonfly records: http://www.bto.org/volunteer-surveys/gbw/gardens-wildlife/garden-invertebrates/dragonflies

5. **iRecord** is the new Biological Records Centre national recording scheme for all taxa: http://www.brc.ac.uk/irecord/ and is the future for dragonfly recording. You will be able to input your records online directly into iRecord. Verified records will then be passed seamlessly through to being published on the NBN Gateway. With our existing system it can take up to one year for a submitted record from me to appear on the Gateway but with the online system this will be potentially cut to weeks.

What is a record? A basic dragonfly record has 5 parts to it:

1 Your name and contact details
2 The date you made your sighting in the form 12/06/2015
3 The name of the site where you made your sighting, if possible relating this to an appropriate water body. In addition a note on the location's habitat(s) would be helpful
4 An Ordnance Survey Grid reference for the site. An 8- or 6-figure reference is best and a good way to find this is by using Cofnod's Interactive Map: http://www.cofnod.org.uk/Home
5 What you saw including breeding evidence and abundance counts if possible (more below).

Wherever possible I would also urge you to do complete recording during a site visit rather than send in sightings of one or two species. This means noting down the number of adults (ad) of each species seen on the visit and what they are up to in terms of copulation (co), oviposition (ov) and emergence (ex and em). If you do this please add a note to this effect in the comments column so that we know what species weren't seen. A further note to indicate whether you have also searched for exuviae (ex) and/or larvae (la) would be helpful. Note that adults involved in copulation or oviposition are added to the total of adults seen but not exuviae and pre-flight emergents.

Abundances of the various life stages can be entered either as numbers actually counted or as estimates as in A = 1, B = 2-5, C = 6-20, D = 21-100, E = 101-500, F = >500. If you have an urge to go further, another way to be helpful in adding to the knowledge base for dragonflies is to select your own favourite local site that has a good number of species and employ a monitoring scheme. This involves making regular visits over several years along defined traverse lines. This can pick up trends in dragonfly populations. More information on dragonfly site monitoring can be found on the BDS website: http://www.british-dragonflies.org.uk/content/british-dragonfly-monitoring-scheme .

Please remember that the most important life stages that can be recorded are not the attractive, colourful flying adults but the sombre exuviae (em) and associated pre-flight emergent adults (em). Exuviae are the shed skin left after final moulting and finding these amongst the marginal vegetation is rewarding as it proves that the species has successfully bred at the site. The underwater larval or nymph stage (la) is slightly less important but recording them is a more specialised task and few people tend to search for larvae let alone identify them. But their identification need not be too difficult and an excellent book by Steve Cham on identifying British Odonata larvae and exuviae is available via

the BDS website at the ridiculously low price of £10: http://www.british-dragonflies.org.uk/content/field-guide-larvae-and-exuviae-british-dragonflies .

Further acknowledgements

Additional to my list of recorders in the last newsletter who sent me records in 2014 I wish to thank Sue Loose and Mark Sheridan and Jill Tattershall for recently submitting their excellent records.

Andy Holt's video of hawker larva (nymph) shedding skin under water

This short video has won awards and is apparently one of the first attempts to capture a larval hawker during its underwater moulting. Notice the development of the wing buds in the soft vulnerable dragonfly nymph and the white breathing tube linings that have been pulled inside out and left with the old skin: https://vimeo.com/108648786 . Such nymphs may undergo as many as 14 moultings before finally emerging as an adult dragonfly.

The Secret World of Dragonflies by Andy Holt

This is a really superb video of the dragonfly's complete life cycle: https://www.youtube.com/watch?v=edW30jsCy6M .

A few dragonflies from the Atlantic Rainforest, Brazil

In January I visited lovely REGUA in the Atlantic Rainforest of Brazil with an international group and, as you might expect, I took quite a few dragonfly photos which will appear on my website: https://www.flickr.com/photos/45644411@N03/sets/ . REGUA is a privately run project to re-establish continuous rainforest in a large area that had been devastated by cattle ranching: http://www.regua.co.uk . We identified approximately 169 species out of a total of 203 species that have been discovered there and this is the most biodiverse dragonfly faunal assemblage we have encountered in several years visiting key tropical areas around the world. Several new species were also discovered during the trip by our intrepid Dutch leader Tom Kompier. I hope this small selection will rekindle your appetite to go out and observe these lovely creatures in the coming months. All the photos are my own.

A male *Zenithoptera lanei*, a rather dashing libellulid percher at still water bodies.

A male *Argia clausseni*. Members of this genus of coenagrionid 'pond damsels' all breed perversely in running water. Central and South America have very many species which are often difficult to separate. Thankfully, there were only 4 at REGUA and this one is distinctive.

A copulating pair of *Dasythemis mincki*, a high altitude libellulid that resembles our Keeled Skimmer.

A male *Diastotops obscura*, a common libellulid of still water habitats.

A male *Leptagrion elongatum.* Some of this coenagrionid genus are extremely long. They are known as bromeliad guards as they are territorial at small pools of water held in the epiphytic bromeliad plants.

This unusually green but common libellulid, *Erythemis vesiculosa*, resembles *Orthetrum sabina* of Asia in being extremely aggressive and will regularly eat odonates as large as itself. Unusually both sexes are the same colour, another feature shared with *O. sabina*.

Minagrion waltheri in cop. A colourful high altitude coenagrionid species of marshy habitats.

Male *Orthemis discolor*, a common skimmer-like perching libellulid at still water.

Male *Tauriphila argo*, one of several red gliding libellulids.

Male *Hetaerina rosea*. Species of red-coloured Calopterygid *Hetaerina* live along streams and rivers and are related to our Demoiselles.

Male *Heteragrion aurantiacum*. These large damselflies frequent shady sections of streams and rivers and are called flatwings. The family Megapodagrionidae is not represented in Europe.

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