

We need your dragonfly and damselfly records

Dr Allan Brandon, North Wales Dragonfly Recorder for the British Dragonfly Society.

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The British Dragonfly Society (BDS) is planning a new atlas of British and Irish dragonflies and damselflies for 2013. Though recording across North Wales has intensified since 2000 there are still many gaps in our recording of all species and your observations are greatly needed to help fill these. Please note that this is the last year to contribute to this atlas and I would encourage you to send in your observations before it is too late. I have the task of processing all such records and making sure they go into the national system. A copy of all records BDS records for North Wales also goes to COFNOD.



Mating Blue Emperor (*Anax imperator*). Photo A. Brandon. This species was a rare sighting before the late 1990s when it moved north and north-west into the region. It is now widespread and even breeding in the mountain tarns of Snowdonia. Is this due to Climate Change?

Dragonflies and damselflies, which breed in either running or still water depending on species, are under increasing stress from habitat loss and pollution. They are extremely sensitive indicators of water quality as they are also of Climate Change and worldwide there are many changes taking place in their distribution. Nationally, new species are moving north and entering Britain from the continent and, even for the relatively small region of North Wales, several species have extended their ranges to become resident here since around 2000. So it is important to establish just where each species is currently breeding so we can monitor future changes. Your records will also shed light on the phenology of these intriguing insects.



Female Large Red Damselfly (*Pyrrhosoma nymphula*). Photo A. Brandon. This year the species was observed to emerge on the 6th April which was a record for the earliest emergence. Is this due to Climate Change?

Though lively and beautiful, sun-loving dragonflies and damselflies have never been as popular as, say, butterflies and moths but the publication of several new field guides has led to a surge in interest. Currently 35 species have been recorded from North Wales although four of these are occasional migrants from the Continent and are not known to have bred here. They are particularly popular with wildlife photographers as they pose an interesting challenge in technique. As they are very active flying creatures, identifying adult dragonflies can appear daunting but in reality, and with a little practise, it should not prove that difficult if one is patient enough to wait until they settle up. Their colours are sexually dimorphic: males are more brightly and distinctively coloured and the easiest to identify; females are typically cryptically coloured and with some species of damselfly there may be a bewildering array of colour forms. Poorly coloured emergent and immature adults (teneral) are difficult to identify and are therefore best avoided by beginners.



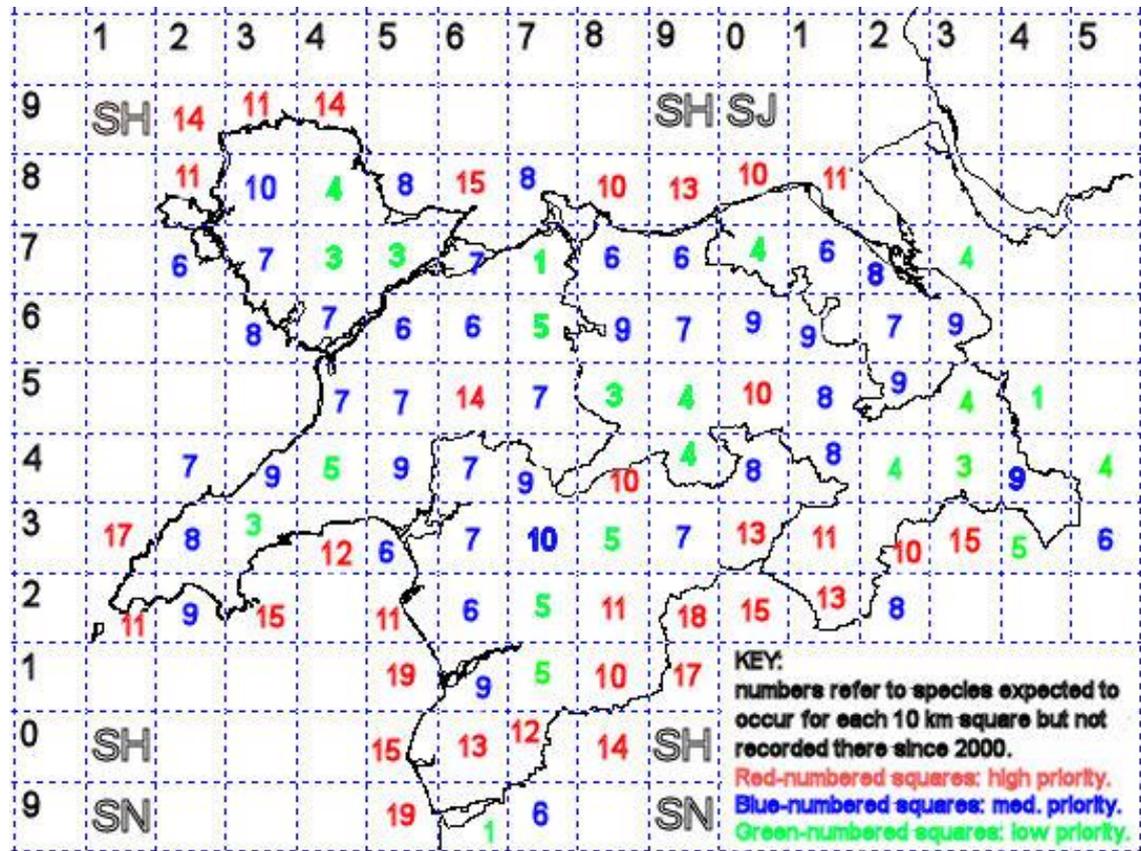
Male Downy Emerald (*Cordulia aenea*). Photo A. Brandon. Llyn Tecwyn Isaf is the only known site in North Wales where this species is known to breed. The larvae live amongst the leaf litter of tree-lined lakes. Are there any other lakes with this species in North Wales?



Male Common Clubtail (*Gomphus vulgatissimus*). Photo A. Brandon. In North Wales the species is only known to breed along the River Dee and some tributaries between Holt and the Wrexham area. Could it also be breeding in some of our other rivers?

As regards where to record, I've attached a map showing what the state of recording is for each 10 km square across North Wales. This is the resolution that will be used

in the new BDS atlas. The numbers refer to the potentially ‘missing’ species for each square. The squares with red numbers are my target areas. But records from anywhere are most welcome as we also need to understand the distribution at more detailed scales and it is hoped to publish a more detailed account for North Wales at a later date. The actual ‘missing’ species are shown in the attached Excel chart with the use of abbreviations.



As regards what details to give, the minimum criteria would be date seen, location name, 6- or (better) 8-figure grid reference and the name of the species seen (with photos if possible to confirm identification – quality is not that important). Of more help in recording would be numbers seen of each stage: adults (males and females), copulation pairs (including tandem pairs), oviposition (egg-laying), exuviae (larval skins), emergent adults. The latter two stages are really the most important as they indicate positively that the species has bred successfully at the water body. The best way of estimating numbers of each stage is: A = 1, B = 2-5, C = 6-20, D = 21-100, E = 101-500, F = >500.

Potentially missing species for each 10 km square in North Wales: 1 Jun 2012																
	SH29 5%	SH39 45%	SH49 40%													
	Cv Cs Cpa Cpm Ec Ip Bp Ac Aj Am Ai Cb Ld Oca	Cv Cs Cpm Bp Ac Am Ai Cb Oco Oca Sd	Cv Cs Ls Cpm Ip Bp Ac Am Cb Ld Oco Oca Sst Sd		Partly sea, rough proportion of land shown as %		Partly Cheshire VC; North Wales prop. in %		Partly Shropshire VC; North Wales prop. in %		Partly Montgomery VC; North Wales prop. in %		Partly Cardigan VC; North Wales prop. in %			
	SH28 30%	SH38	SH48	SH58 20%	SH68 10%	SH78 25%	SH88 15%	SH98 10%	SJ08 45%	SJ18 30%	Species in italics refer to pre-2000 records only. Abbreviations used are shown below.					
	Cv Cs Ls Cpm Ip Bp Ac Aj Cb Oco Oca	Cv Ct Ip Bp Ac Am Ld Oco Oca Sd	Cv Cs Ct Am	Cv Cs Ct Ip Am Oco Oca Sd	Cv Cs Ls Cpm Ec Ie Ip Bp Am Ai Cb Lq Oco Oca Sd	Cv Cs Bp Aj Cb Lq Oco Oca	Cs Ls Pn Bp Aj Am Cb Lq Oca Sd	Cv Cs Ls Pn Cpa Ec Ie Bp Ac Aj Ai Ld Oca	Cv Cs Ls Bp Ac Ag Aj Lq Sd	Cv Cs Ls Pn Bp Ac Ag Aj Lq Ld Sd						
	SH27 25%	SH37 90%	SH47	SH57	SH67 50%	SH77	SH87	SH97	SJ07	SJ17	SJ27 60%	SJ37 10%				
	Cv Cs Ac Cb Oco Oca	Cv Ip Ac Aj Ai Oco Sd	Ct Oca Sd	Ct Oca Sd	Cs Ls Ip Bp Oco Oca Sd	Oca	Cv Cs Bp Am Cb Oco	Cs Ls Bp Cb Lq Ld	Ls Bp Ag Cb	Cs Bp Ag Aj Cb Sd	Cs Cs Ls Cpm En Cb Lq Sd	Cv Bp Aj Gv				
		SH36 35%	SH46	SH56	SH66	SH76	SH86	SH96	SJ06	SJ16	SJ26	SJ36 70%				
		Cv Cs Cpm Ip Bp Aj Cb Oco	Cs Bp Ac Ai Oco Oca Sd	Ls Cpm Ip Bp Aj Am	Cs Ip Bp Ld Oca Sst	Cs Ip Bp Am Oca	Cs Bp Ac Aj Ai Ld Oco Oca Sd	Cs Bp Aj Am Ai Ld Oca	Ls Bp Ac Ag Am Cb Lq Oca Sd	Cs Ls Cpm En Bp Ag Aj Lq Oca Sd	Cv Cpm Cb Gv Ssa Sd	Cv Cs Cpm Aj Cb Ld Oca Ssa Sd				
			SH45 70%	SH55	SH65	SH75	SH85	SH95	SJ05	SJ15	SJ25	SJ35 95%	SJ45 10%			
			Cs Cpm Ip Bp Lq Oco Oca	Cs Cpm Ip Bp Am Oca Sst	Cs Ct Cpa Cpm Is Ip Bp Ag Ac Am Ai Lq Ld Oca	Cv Cs Cpm Bp Ag Am Oca	Bp Am Oco Oca	Cv Cs Bp Am	Cv Cs Ls Bp Ag Am Lq Oca Ssa Sd	Cs Cpa Bp Aj Am Lq Oca Sd	Cv Cs En Bp Am Gv Lq Oca Sd	Cpm En Aj Sd				
	SH24 5%	SH34 50%	SH44	SH54	SH64	SH74	SH84	SH94	SJ04	SJ14	SJ24	SJ34 95%	SJ44 65%	SJ54 5%		
	Ip Bp Ac Am Ai Ld Oca	Cs Ct Cpm Ip Bp Ac Am Oco Oca	Cs Cpm Bp Ag Oca	Cs Ct Cpm Ip Bp Ac Am Ld Oca	Cs Ip Bp Ag Am Ai Oca	Cs Ip Bp Ac Am Ai Ld Oco Oca Sst Sd	Cs Ls Ip Bp Ac Am Ai Oco Oca Sst Sd	Ip Bp Am Oca	Cs Ls Bp Aj Am Cb Oca Sd	Ec Bp Ag Aj Am Lq Oca Sd	Ls Bp Gv Ssa	En Am Sd	Pp Cpm Ip En Bp Aj Cb Oca Sd	Cv Aj Gv Sd		
	SH13 15%	SH23 50%	SH33 80%	SH43 40%	SH53 50%	SH63	SH73	SH83	SH93	SJ03 95%	SJ13	SJ23 65%	SJ33 10%	SJ43 35%	SJ53 5%	
	Cv Cs Ls Ct Cpa Ec Ip Bp Ac Aj Am Ai Cb Lq Oco Oca Sst	Cs Cpm Bp Ac Aj Am Ai Oca	Cv Cpm Bp Ac Aj Am Ld Oco Oca Sd	Cs Ct Ip Bp Ac Aj Ai Lq Ld Oco Oca Sd	Cv Cs Ct Ip Ag Oca	Cs Cpm Ip Ag Am Ld Oca	Cs Ct Ip Bp Ac Am Ai Ld Oca Sst	Bp Ac Am Oco Oca	Cv Ip Bp Am Ld Oca Sd	Cv Ls Cpm Ec Ie Bp Am Ai Cb Ld Oca Sst Sd	Cv Cs Ls Bp Ac Ag Am Ai Lq Oca Sd	Cv Ls Bp Ac Aj Am Cb Oca Ssa Sd	Cv Ls Cpa Ip En Bp Aj Am Ai Cb Gv Lq Oca Ssa Sd	Cv Cpm Bp Cb Gv	Cv Cpm Ip En Bp Cb	
	SH12 30%	SH22 35%	SH32 15%		SH52 35%	SH62	SH72	SH82	SH92 30%	SJ02 5%	SJ12 65%	SJ22 10%				
	Cv Cs Ls Ct Cpm Ip Bp Ac Oco Oca Ssa	Cs Cpm Ip Bp Ac Am Oco Oca Sd	Cv Cs Ls Ct Cpm Ip Bp Bp Ac Aj Am Lq Oco Oca Sst		Cs Ls Ct Cpm Ip Bp Ac Aj Am Oca Sd	Cs Ip Bp Am Ld Oca	Cs Ip Bp Am Oca	Cv Cs Ie Ip Bp Ac Ai Lq Ld Oco Oca	Cv Cs Ls Pn Cpa Ec Ie Ip Bp Ac Am Ai Cb Lq Ld Oca Sst Sd	Cv Cs Cpa Ec Ie Ip Bp Ac Am Ai Cb Lq Ld Oca Sst	Cv Cs Ie Bp Ag Aj Am Ai Cb Lq Ld Oca Sd	En Bp Aj Cb Oca Oco Sd				
					SH51 5%	SH61	SH71	SH81 95%	SH91 15%							
					Cv Cs Ls Pn Cpa Ec Ie Bp Ac Aj Am Ai Cb Lq Ld Oco Oca Sst Sd	Cv Cs Ip Bp Am Ai Lq Ld Oca	Cs Ip Ai Ld Oca	Cv Cs Ip Bp Ac Am Ld Oco Oca Sst	Cv Cs Cpa Ec Ip Bp Aj Am Ai Lq Ld Oca Sd							
					SH50 35%	SH60	SH70 60%	SH80 2%								
					Cv Cs Ls Ec Ip Bp Ac Aj Am Lq Ld Oco Oca Ssa Sd	Ls Ip Bp Ac Aj Am Ai Ld Oco Oca Sst Sd	Cv Cs Pn Cpa Ip Bp Am Ai Cb Lq Ld Oco Oca Ssa	Cv Cs Pn Is Ip Bp Ag Am Ai Cb Ld Lq Oco Oca Ssa								
					SN59 5%	SN69 25%	SN79 3%									
					Cv Cs Ls Pn Ct Cpa Ec Ie Ip Bp Aj Am Ai Cb Lq Ld Oco Oca Sd	Ip	Cs Ip Bp Ai Oco Oca									
Abbrev. used for species	Ac	<i>Aeshna cyanea</i> (Blue or Southern Hawker)							Ag	<i>Aeshna grandis</i> (Brown Hawker)						
	Cv	<i>Calopteryx virgo</i> (Beautiful Demoiselle)							Aj	<i>Aeshna juncea</i> (Moorland or Common Hawker)						
	Cs	<i>Calopteryx splendens</i> (Banded Demoiselle)							Am	<i>Aeshna mixta</i> (Migrant Hawker)						
	Ls	<i>Lestes sponsa</i> (Common Spreading or Damselfly)							Ai	<i>Anax imperator</i> (Blue Emperor)						
	Pp	<i>Platycnemis pennipes</i> (Blue Featherlegs or White-legged Damselfly)							Cb	<i>Cordulegaster boltonii</i> (Common Goldenring)						
	Pn	<i>Pyrhosoma nymphula</i> (Large Red Damselfly)							Gv	<i>Gomphus vulgatissimus</i> (Common Chitlail)						
	Ct	<i>Ceriatagrion tenellum</i> (Small Red Damselfly)							Lq	<i>Libellula quadrimaculata</i> (Four-spotted Chaser)						
	Cpa	<i>Coenagrion puella</i> (Azure Buet or Damselfly)							Ld	<i>Libellula depressa</i> (Broad-bodied Chaser)						
	Cpm	<i>Coenagrion pulchellum</i> (Variable Buet or Damselfly)							Oco	<i>Orthetrum coerulescens</i> (Keel-damselfly)						
	Ec	<i>Enallagma cyathigerum</i> (Common Buet or Damselfly)							Oca	<i>Orthetrum cancellatum</i> (Black-tailed Skimmer)						
	Ie	<i>Ischnura elegans</i> (Common Buet)							Sst	<i>Sympetrum striolatum</i> (Common Darter)						
	Ip	<i>Ischnura pumilio</i> (Small Buet or Scarce Blue-tailed Damselfly)							Ssa	<i>Sympetrum sanguineum</i> (Ruddy Darter)						
	En	<i>Erythronema najas</i> (Large Red-eye or Red-eyed Damselfly)							Sd	<i>Sympetrum danes</i> (Black Darter)						
	Bp	<i>Brachytron pratense</i> (Hairy Hawker)							Ldu	<i>Leucorrhinia dubia</i> (Small Whiteface or White-faced Darter)						

Please send the records in anytime (much better late than never!) but if it was a really interesting sighting, for example an indication of a migration underway, a prompt response would allow me to say something in a current 'North Wales Dragonfly Newsletter'; this is copied onto the Cofnod website. More detailed records are best sent in using Excel format with separate columns for each stage entry. Examples of the way to send records in is provided by the BDS website page: <http://british->

dragonflies.org.uk/content/recording-dragonflies-and-damselflies-british-isles. Send records to me at my e-mail address: allanrowenconwy@sky.com.