

After two years of data collection we are starting to build up a better picture of the distribution and abundance of UK Common Clubtail populations. A big thank you to all the volunteers who gave up their spare time to scour their local rivers for this elusive Dragonfly.

The following rivers are the historic strongholds of the Common Clubtail and were the focus of this year's project:

The Severn, Avon, Teme and Vyrnwy

The Thames and Kennet

The Teifi and Towy

The Dee

The Wye

The Arun

The **Otter** was also included as the first Common Clubtail record for the Otter was taken in 2017.



461

Common Clubtail
records were made in
the 2018
493 less than 2017
(this reflects a drop
in survey effort)



145

volunteers took part in the 2018 Clubtail Count 58% drop from 2017





58

monads (1km2 OS map grids) were surveyed in 2018 **61** less than 2017



2

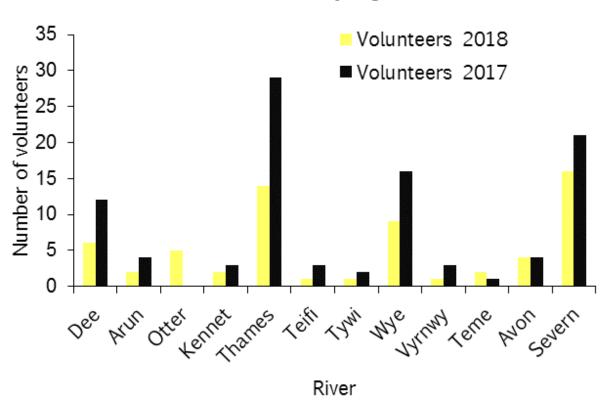
average number of visits per monad

1 less than 2017

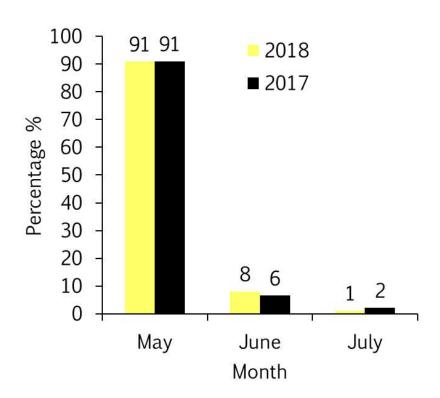
Map: Ordinance Survey data © Crown copyright and database right 2017. Images: Dragonfly silhouette by Kisspng.com, person and clipboard silhouette by Freepik.com

Clubtail Count Data Breakdown

Volunteers surveying each river



Clubtail sightings by month

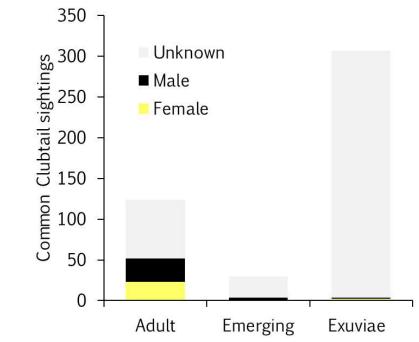


91% of Clubtail records were made during May, the same as in 2017, reflecting a rigid emergence season.



Images: Emerging Clubtail by Paul Ritchie

Clubtail sightings by life stage and sex



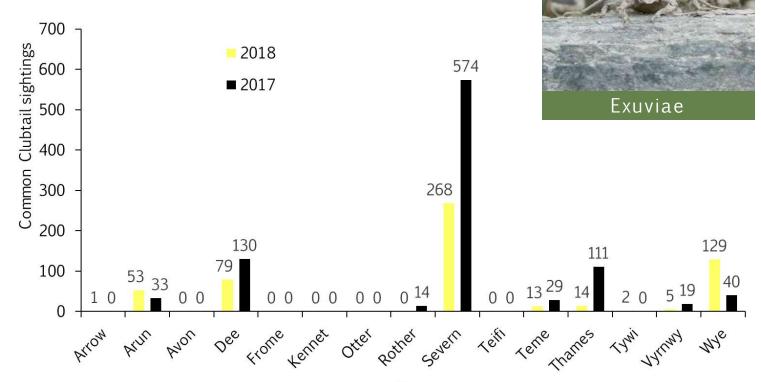
of Clubtail records were of exuviae. This reflects the fact that only adult females return to the water to egg lay and newly emerged adults leave the river quickly once they are ready to fly.





Clubtail sightings by river

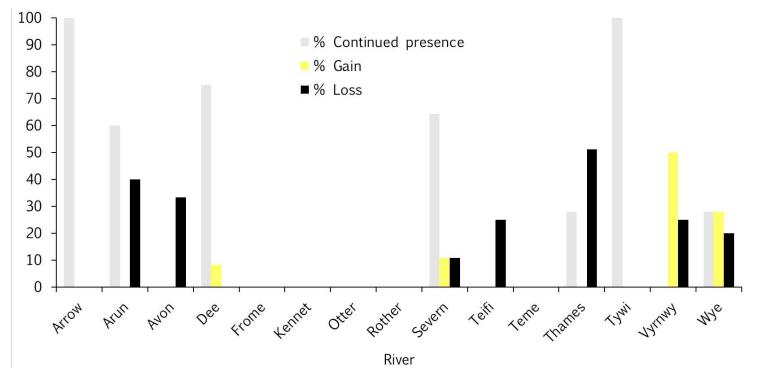
58% of all monads searched were found to contain Clubtail.



Clubtail sightings by month

Continued presence % monads with historic Clubtail records and where Clubtails were again found in 2018

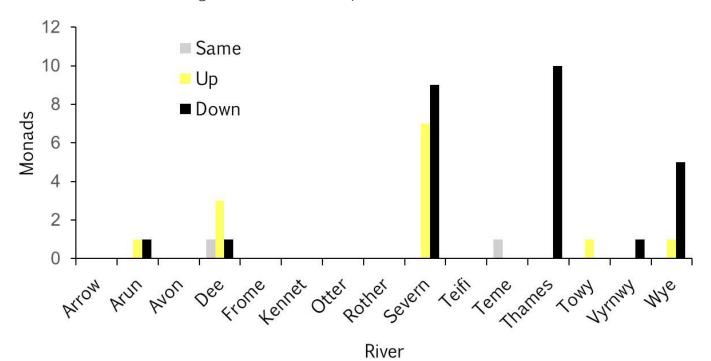
Gain % monads with no historic Clubtail records but where Clubtails were found in 2018 Loss % monads which have historic Common Clubtail records but where no Clubtails were found in 2018



*historic Common Clubtail records taken from the British Dragonfly Society Recording Scheme on NBN Atlas Monads with continued absence, with no historic data and no 2017 data, have not been included here.

Changes in Clubtail count between monads surveyed in 2017 and 2018

Same monads where average Clubtail records per visit were the same in 2017 and 2018 Up monads where average Clubtail records per visit increased from 2017 to 2018 Down monads where average Clubtail records per visit decreased from 2017 to 2018



Monad Maps

Map Key: Site loses and gains

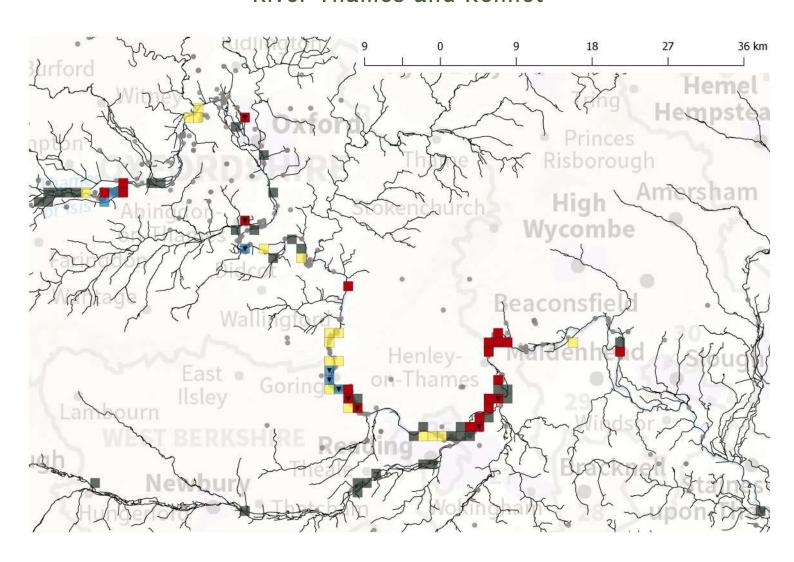
- Historic site: sites with historic (pre 2017) Clubtail records.
- Clubtail absent: monads negative for Clubtail during their last Clubtail Count survey (either in 2017 or 2018),
- Site loss: Sites with pre 2018 records, but Clubtail absent during 2018 survey.
- Clubtail site not resurveyed: Clubtail present in 2017. Monads were not resurveyed in 2018.
- Site stable: sites with pre 2018 Clubtail records and 2018 Clubtail Count records.
- Site gain: Clubtail recorded as present for the first time during 2018 Clubtail Count.

Map Key: Count changes at repeat survey sites

- ▲ Decrease in average count per site
- Average count per site the same
- Increase in average count per site

Maps were produced on QGIS with Ordinance Survey data © Crown copyright and database right 2017.

River Thames and Kennet



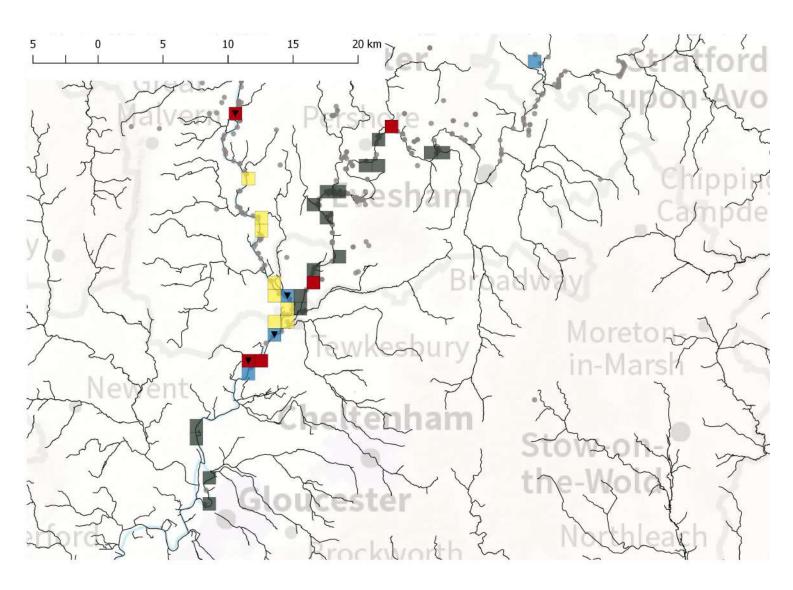
The 2018 results for the **River Thames** are troubling, with a number of sites that were positive for Clubtail in 2017 being reported as negative, and a decline in sightings within the stronghold near Goring. However, 50% of the loss sites only received one survey visit in 2018, so it is possible that the presence of Common Clubtail may have been missed.

Clubtails have still not been found on the River Kennet as of 2018, despite historic records.



Image: River Thames near Goring by Gioconda Beekman

Lower River Severn and River Avon



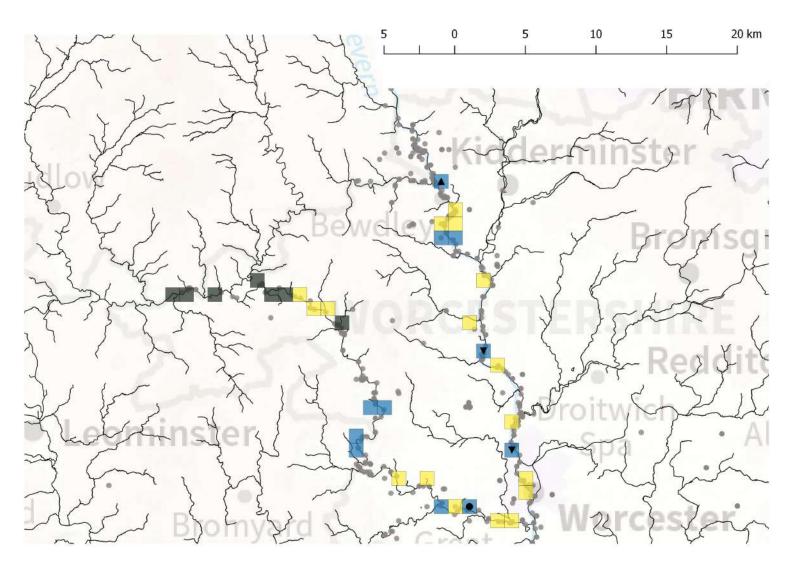
While historic records would suggest that Clubtail were once widespread on the River Avon, after two years of the Clubtail Count, only one surviving site has been confirmed.

The 2018 results would suggest that Clubtail declined on the **lower River Severn**, with a couple of sites that were positive for Clubtail in 2017 being reported as negative, and a decline in sightings around Tewkesbury.



Image: River Severn near Tewksbury by John Clift

Middle River Severn and River Teme



A number of historic sites on the middle and lower sections of the **River Teme** were confirmed to still support Clubtail.

Results for the middle River Severn appear relatively stable with no new losses or gains.

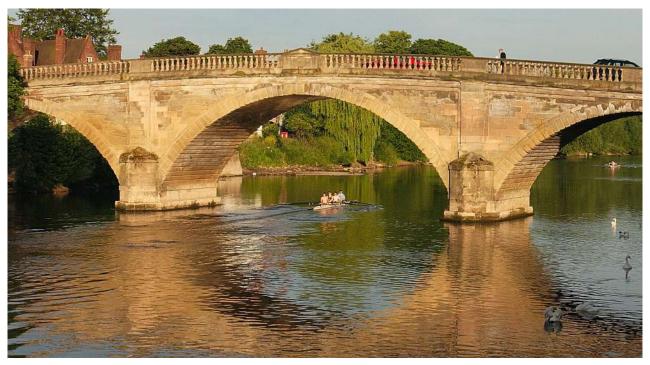
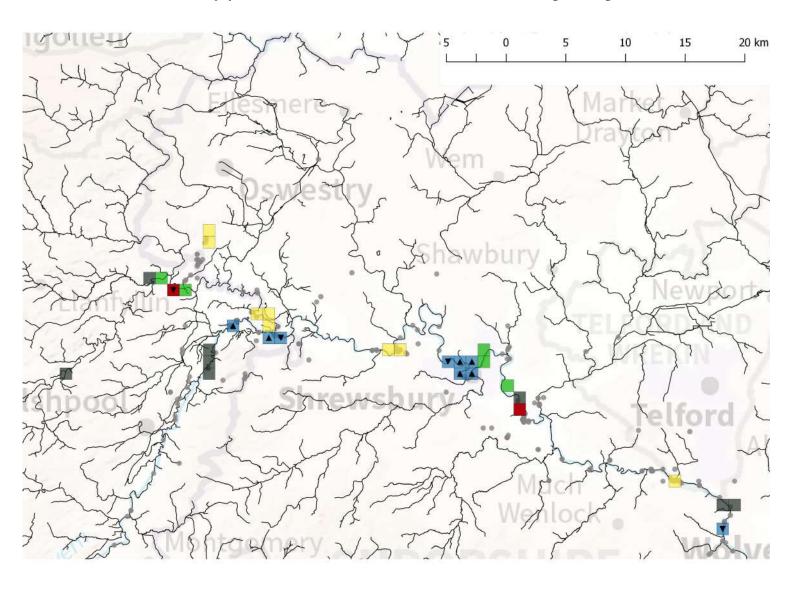


Image: River Severn at Bewdley by Michael Warren

Upper River Severn and River Vyrnwy



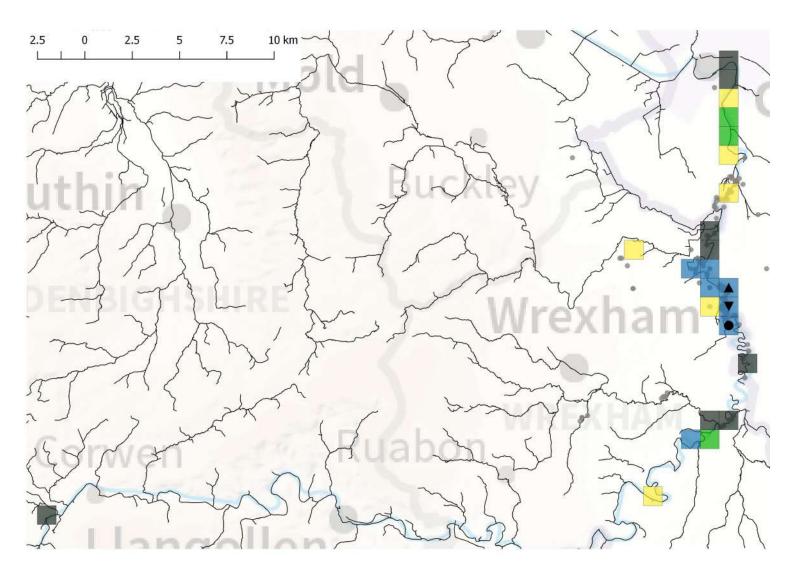
Results from the **upper River Severn** look promising, as multiple new Clubtail sites were identified, and most of the repeat survey sites supported Clubtail again in 2018.

Results for the River Vrynwy were mixed with a monad loss from 2017 to 2018 but two monad gains.



Image: River Severn at Shrewsbury by Jim Roberts

River Dee

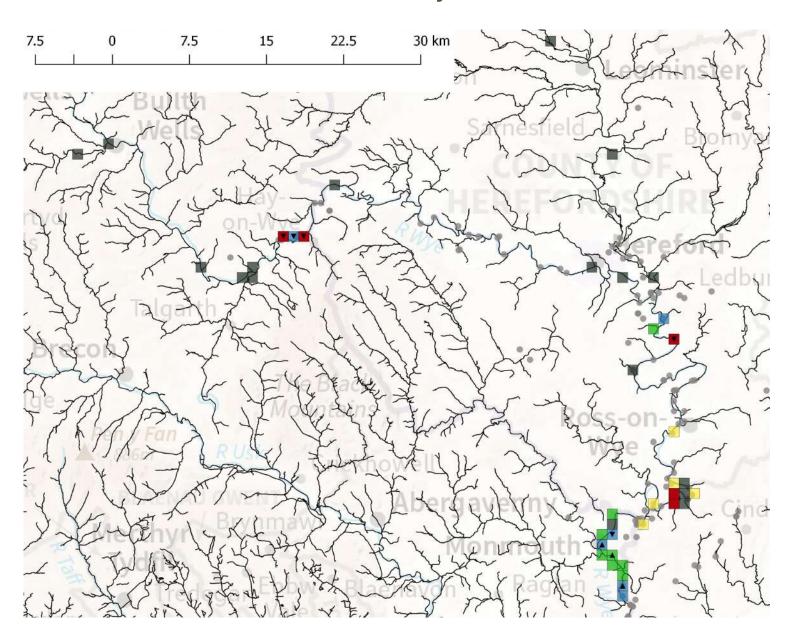


The **River Dee** continues to be one of the most stable strongholds for Clubtail in the UK, with no new losses, gains to the north and south, and a continued presence of Clubtail at repeat survey monads around Holt.



Image: River Dee near Holt by Michael Day

River Wye

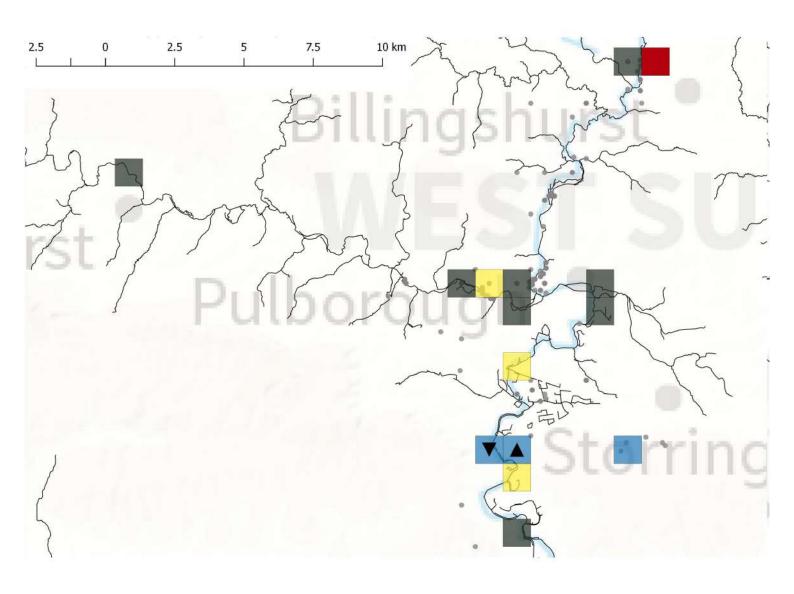


The **River Wye** performed well in 2018, particularly around Monmouth were multiple new sites where discovered. Further north results were more mixed, with the loss of multiple repeat survey sites.



Image: River Wye at Monmouth by Keith Moseley

River Arun

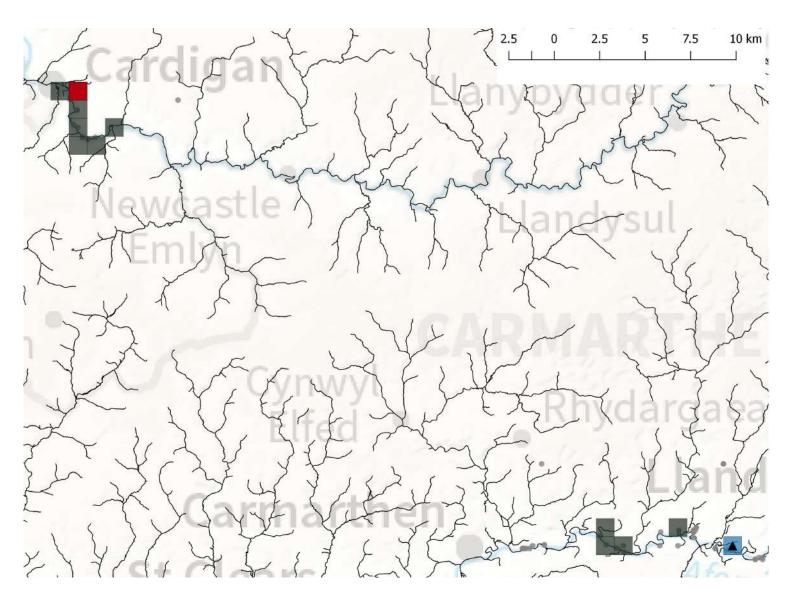


The **River Arun** is under recorded compared to the other river systems. However, the few results produced for 2018 indicate the populations South-west of Storrington as being relatively stable.



Image: River Arun at Houghton bridge, South-west of Storrington by puffin11k, flickr

River Teifi and Towy



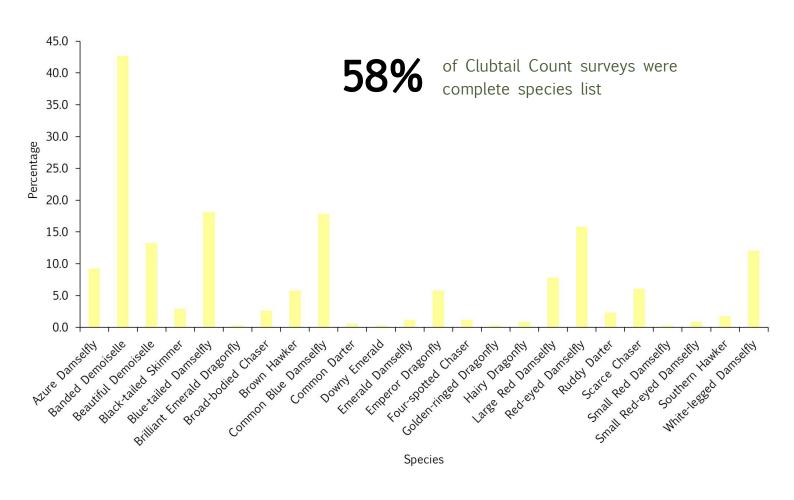
Clubtail have not yet been located on the River Teifi by the Clubtail Count so far. On the other hand, one historic site on the River Towy was found to still support Clubtail in small numbers this year.



Image: River Tywi downstream of Clubtail site by Joy, flickr

Additional Records

Percentage of complete list surveys where other species were recorded



Top 3 species



42.7% of sites



18.2% of sites



17.9% of sites