

A view on invertebrate monitoring for the Wensum Catchment Partnership

The UK's largest volunteer invertebrate monitoring program The Riverfly Partnership with its ARMI protocols, is hosted by the FBA .

Back in 2018 when the Wensum Partnership was formed a review was undertaken looking at the past two decades of studies and material on the Wensum. One of these reports came from what was then the S&TA (now Wildfish) and their Riverfly Census report undertaken in 2015? on the Wensum. This made the local media coverage and the headlines read that the river was dead. It led to the start of the formation of our own studies using EA guidance and Riverfly. COVID came along and delayed things, but today we have around 20 volunteers sampling across 16 sites using basic Riverfly protocols.

This has exposed some stretches of the River, particularly around its headwaters to have low Taxa scores, which also align to poor water quality results identified through citizen science and the CaSTCo program.

Recently a further report was published by Wildfish with a repeat of its Riverfly Census, which ranked the Wensum bottom of the list of chalk streams and rivers surveyed This uses the protocol defined within the Smart Rivers scheme.

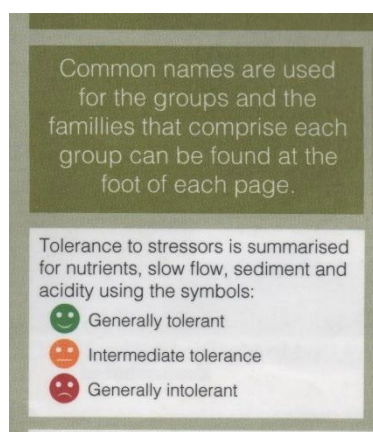
This Census has caused us to investigate why it should be at such a variance with our own ARMI protocol findings and to how we should take it forward.

The bottom line is all about the level of analysis by species and the way each species is identified and grouped. The more species and the more groups, means more skills and costs to define these.

Riverflies - 8 species groups Basic Riverflies sampling.

All our samplers have been trained in this and have charts with appropriate identification pictures.

Extended Riverflies – 33 species groups



Dennis Willis has been on workshop for this 18th Sept 2021 and been practising and recording for when the database can accommodate this is up and running. Hopefully will be able to backdate data.

Dennis, Dan, Chris, Geoff and David (Wheatfen freshwater group) have been doing similar for River Yare site and a couple of other locations. Others not attended workshop but more than capable of doing this.

Bioblitz sites on upper Wensum headwaters did cover some of this – David Harper should have data.

David Harper purchased charts for this for the last workshop. But was asked by Steve Brooks not to give them out to attendees at this stage. We don't agree as there can be confusion between caseless caddis, beetle larva, craneflies larva and water snipe larva. The pictures in the chart certainly help with distinguishing them and could encourage interest.

It also has a traffic light system for indicating tolerance to environment stresses.

We think this is the way forward probably next year but charts should be provided (as an introduction & aid).

Riverfly Census - SmartRivers - Ian Hawkins has repeatedly suggested (to Dennis) that Wheatfen Group should be trained up on this. We cannot see where any of us would have the time. We would suggest not to get involved, however. If any individuals wish to get involved then that should be their choice but would need extremely keen interest and time. Need equipment, chemicals and books/keys for identifying species (accessible at Wheatfen and some books purchased for them by NNNS).

If it is considered as an additional in depth study then significant appropriate funding would be required to pay for it.

Ecountability is a consultancy engaged in the Wending Beck project and has suggested yet another protocol of 20 Taxa groups. Dennis has had communication/phone call with Alex Begg of Wendling Beck group and basically concludes he wants people to help of which we said we don't have at this time. Have advised we could train some of his group on Riverflies (8 groups) but they would have to find funding.

In Conclusion

Whilst any volunteer is free to undertake any form of survey they like, we at the WCP must ensure we have standard processes and protocols that people can follow and be trained in.

Yes, some people have a strong interest in invertebrates and the wide range of species that exist in our rivers. There is also clear evidence that the more detail you investigate at species level the potential for gradual linkages to evidence of pollutants and flows can be made. However, both Smart Rivers and Ecountability rely on professional consultancy to undertake, what is complex and time-consuming studies, with results that appear to be no better to standard to basic water quality sampling. The costs associated with this at a catchment scale, makes this beyond the current scope of the WCP and it's associated budgets.

So we will continue to build our volunteers around the Riverfly ARMI and when that system is available online enhanced to support the wider 33 Taxa groups, we will ask our volunteers if they wish to enhance both their skills and effort into analysis of the wider 33 Taxa grouping. If not we will remain with the existing 8 groups and scoring protocols.

Clearly anybody is entitled to come and Investigate the freshwater life of the river, however, measure the river and it's life. But the headlines need to reflect in real terms what is in the river, rather than make headline statements.

Kelvin Allen

David Harper

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3rd July 2023