

Shropshire Hills AONB Conservation Fund 2015-2016 Report

Project Title – Teme Riverflies

Introduction

Freshwater invertebrates (riverflies) are an essential early warning system for the health and condition of our waterbodies. Three key groups of riverflies are often highlighted as key indicators across the country: the up-wing flies or mayflies (Ephemeroptera), caddisflies or sedges (Trichoptera) and stoneflies (Plecoptera).

They live most of their lives as larvae on the bed of rivers and still waters, emerging as short-lived adult flies mostly in spring and summer, often en masse. Spectacular hatches can trigger fish feeding frenzies. Fly fishermen study and imitate the adults in their artificial lures.

Riverflies, along with other freshwater invertebrates, are at the heart of the freshwater ecosystem and are a vital link in the aquatic food chain. Riverfly populations are affected by many factors, predominately water quality, habitat diversity, water level and flow rate. Their common characteristics of limited mobility, relatively long life cycle, presence throughout the year and specific tolerances to changes in environmental conditions make them powerful biological indicators to monitor water quality, and are commonly referred to as ‘the canary of our rivers.’

Regular monitoring of riverflies on a stream or a river will give the Trust and our partners’ excellent, constant data to evaluate changes in water quality. Our network of volunteers allows us to react quickly to any changes in population numbers and species diversity should an incident occur.

The Trust has the largest number of riverfly volunteer surveyors in the country. We have now trained 217 individuals and we are currently sampling 83 sites on 21 different rivers within the Severn catchment. The more volunteer monitors there are within the AONB the better understanding we and our partners at the Riverfly Partnership and the Environment Agency have about the condition of invertebrate species, water quality and the wider health of the river catchment.

The Trust chairs the Teme Catchment Partnership involving a wide range of organisations involved in the river catchment. The Teme is a SSSI and its tributary, the Clun, is designated as a Special Area for Conservation for the highly sensitive fresh-water pearl mussel population. The designations on these rivers highlight the importance of this habitat and their associated species. To ensure that we know of chronic and critical changes, and their location and origination the citizen science approach to riverfly monitoring is crucial.

Project

The Severn Rivers Trust hosted a riverfly training workshop in Craven Arms on Thursday 11th June 2015 thanks to support from the Shropshire Hills Area of Outstanding Natural Beauty Conservation Fund and the Catchment Action Fund. Additional support was provided by technical specialist staff from the Environment Agency and The Riverfly Partnership.

Workshop

The workshop was held at the Craven Arms Community Centre and on the River Onny. The event itself combined an indoor sessions in the morning highlighting the importance of our rivers, their species and our management of them. In particular the training highlights the invertebrate species that are key indicators of river quality and what to look for. The second session of the day is spent in the river learning the techniques and methods to obtain the sample. Fortunately for this workshop the day was a beautiful and sunny one, which makes a big difference. After lunch the attendees, with assistance from the technical specialists and trainers, spent the afternoon identifying the different species collected.

Once the training day had been completed the attendees were provided with all the necessary equipment to undertake monthly surveys on their local river. This allows the Trust and the Riverfly Partnership to have a number of volunteers on a wide range of rivers. The data collected will be fed into a national database hosted by the Partnership.

Results

The day was attended by 18 members of the public increasing the number of volunteer monitors associated with the Severn Rivers Trust to 217 across the entire catchment, and 60 in the Teme Catchment. All attendees are now recording riverflies on a monthly basis on their local river within the AONB. The project has been very successful. We normally expect around 10-15 attendees on any one course so we were delighted when 18 members of the public joined us.

Summary

The rivers of the Shropshire Hills AONB are the lifeline corridors of the region. Everything that leaves the land, including the priority habitats mentioned previously, ends up in the rivers. They are therefore a vital indicator of the overall health of the catchment. Rivers are mentioned as a Biodiversity and Environmental Priority of the AONB and as such this project is an important way of monitoring their health and linking more people in to their care through increased understanding and pride in their local river. This workshop is an ideal starter for the Trust's newly funded *Springs of Rivers* project across the catchment which will train more riverfly monitors as well as work with local community groups to undertake habitat restoration projects, litter picks, educational activities and invasive non-native species removal projects.

This project also has positive benefits under other priorities for the AONB. By creating a long-term dedicated monitoring programme the impacts of land use and climate change can be determined within the area. The project is specifically aimed at encouraging local people to engage with their environment and take pride in their local Rivers and River Valleys whilst protecting an important heritage that makes up the AONB.

Photos



Photo 1: Attendees on the River Onny



Photo 2: Tony Bostock, SRT helping to identify invertebrates on the riverbank



Photo 3: Workshop attendees learning the techniques and invertebrate species on the River Onny



Photo 4: Technical staff from the Environment Agency helping the attendees in Craven Arms Community Centre

Press article

56 **Anglingtimes** YOUR FISHING WEEK TUESDAY, JUNE 23, 2015

Des Taylor
DIARY OF A COUNTRYMAN

What a fish to start off!

MY FIRST DAY BACK ON THE RIVER BEGAN SLOWLY BUT ENDED WITH A GIANT CHUB



What a fish! This 5lb 15oz chub made my opening day one to remember.



Thursday - netting insects on the River Onny. Fascinating.

SPENT the final few days of the closed season working on my own stretch of the Severn with Ray Cutler, baiting up and planning my guiding season. You can see how I fared on the last day of this week's diary...

WEDNESDAY
Spent an afternoon and evening on the canal after chub on floating lures - incredible sport on small Rapalas and 8lb fluoro line!
I was casting between trees and giving the lure the tiniest of movement and 'Bang!', a chub would come steaming up the shelf and hammer the lure.
I had eight takes and hooked six chub, the best just over 4lb - good fishing on a river, let alone a canal!
These canals really are coming on as specimen waters and I fancy my chances of a six' on a lure in the next couple of months if I can tear myself away from the river.

THURSDAY
A delightful day at the Craven Arms Community Centre, Shropshire, at a Riverfly Monitoring Initiative workshop.
This day course aims to educate people about the importance of fly life in our waterways. We spent the first session in the classroom studying the various species we can expect to find and then, in the afternoon, the really interesting part was getting out on the water to catch these creatures, identify them and then count them.
Once you have learnt this you can become a member of the team to monitor fly life in our rivers and report back. I think it is more important to get the food larder right in the environment before stocking fish.
What's the point of restocking if the environment can't support the stocks?
Tony Bostock from the Severn Rivers Trust was the presenter and did a great job. Not only that, he is an interesting speaker, and an angler as well. I learned a lot that day, and messing about on the river with Angling Trust man John Cheyne was like going back to my youth with a little net, lifting up rocks to see what we could find.
We were monitoring the River Onny, a place I have fished many times. I suggested to Tony that this is where young kids should start their introduction to the sport, learning the basics of river life - perhaps even a weekend away under canvas, living off the land and river.
Is there anything more exciting and inspiring to a young child than spending the night under the stars around a campfire, eating a brook trout caught only minutes before, having spent the day wading in the water lifting rocks to find bullheads, stone loach and crayfish?
Anyone interested in one of these courses should contact the Riverfly partnership at www.riverfly.org.