

## Watching over the Holmedale to Skeeby Beck

Following a major pollution release into the Holme to Skeeby watercourse, residents have teamed up with local anglers under the umbrella of the Yorkshire Dales Rivers Trust to implement a new river fly monitoring network. The monitoring aims to track the recovery of the river flies, which are a vital part of the watercourse ecosystem. The new network covers 11 locations in the watercourse which originates from moorland springs to the west of Newsham, is joined by a number of significant tributaries, and converges with the River Swale near Brompton-on-Swale.



*Local residents and anglers volunteered for training in Riverfly monitoring following the pollution incident.*

In April, a release of digestate from AWSM Farming in Hutton Magna ran into a Holmedale beck for about 15 hours, turning the beck black and resulting in a catastrophic fish and lamprey kill. The pollution was observed by early morning dog walkers in Ravensworth and Whashton, who reported it to the Environment Agency, local rivers trusts and the Holmedale Community Nature group. The release harmed 10 miles of the beck and flowed into the Swale.

Ben Lamb, a Dalton resident and CEO of the Tees Rivers Trust commented: *“This is a sad day and complete travesty for our beck. It comes at a time when juvenile trout and salmon are emerging from the gravels, almost all coarse fish are spawning, when the first hatches of fly that feed the fish have started, when breeding pairs of kingfisher and dipper are feeding new hatchlings and otter their new cubs.”*

Following the incident, many people and organisations were keen to take action. The upshot was a collaboration between local residents, the Yorkshire Dales Rivers Trust, the Environment Agency, Gilling West Fly Fishers and the Richmond & District Angling Society to set up a new river fly monitoring network.

River flies are invertebrates which are an important part of the aquatic ecosystem and food chain. Not only are they a food source for fish, birds, and other invertebrates, but they also provide vital ecosystem functions. There is a national scheme (the **Anglers Riverfly Monitoring Initiative**) which involves a standardised method of monitoring target river fly species as an indicator for river health. It was launched in 2007 and now has nearly 500 active participants, monitoring 850 river sites across the UK. This data is made available to the rivers trusts and Environment Agency and complements their work. It can also be used to detect pollution incidents and sources, thus acting as a deterrent to polluters.



*Mayfly nymphs feed on organic matter and remove phosphates and nitrates to the land environment when they emerge as flies, thus helping to remove pollutants from water courses.*

Martha McBarron, a member of the Holmedale Community Nature Group, had previously trained as a river fly monitor with the Wear Rivers Trust. After the pollution incident, she contacted the local rivers trusts to see if she could monitor a few sites to track the recovery of the beck. The catchment falls under the remit of the Yorkshire Dales Rivers Trust (YDRT) but there were no active monitoring sites in Holmedale. In the meantime, Ron Wood, Chairmen of Gilling West Fly Fishers, was also taking action – opening a crowdfunding appeal and mobilising the local angling community to provide support. The angling groups had already been collaborating with Jonathan Grey, Research & Conservation Officer from the Wild Trout Trust, and he agreed that river fly monitoring would be useful. Marie Taylor, the CEO of the YDRT put everyone in contact with each other and also with the Environment Agency, to provide ecology support. Subsequently, a number of new volunteers were trained in river fly monitoring, including 9 local residents and 9 anglers.



The monitoring involves disturbing the watercourse sediment, collecting a sample in a net and doing population counts of eight target species, including four types of mayfly, cased and uncased caddis, stoneflies and native shrimp. Funding for the training courses and monitoring equipment was provided by YDRT, the two angling groups and Gilling West Parish Council.

*Cased caddis make their homes from stones, sand and leaves.*

Monitoring will now be undertaken on a monthly basis at the 11 sites by a pair of volunteers. Martha accompanied most of the pairs for their first session in August to make sure they were confident of the sampling technique and the invertebrate identification. She says: *"It's been a great group to work with, as all are very enthusiastic and committed! The good news is that all of the target species were found at most of the sites, albeit in relatively low numbers."* Six rounds of monitoring will be needed to establish normal site variations.





*Tom Raper, came from Otley to run two training courses for the new volunteers. He demonstrated the kick sampling technique, then the trainees had a chance to practise.*

There are also plans to establish another river fly monitoring network of sites on the River Ure in Wensleydale, if additional volunteers come forward for training.

The river fly monitoring complements water quality testing being undertaken in Gilling Beck at Gilling West and in the River Ure at Kilgram Bridge as part of a national **Angling Trust Water Quality Monitoring** scheme. Anglers Will Smith and Mike Grace collect monthly samples for on-site analysis for nitrates, phosphates and other water quality indicators. A report of pollution was made to the Environment Agency following a recent round which found extremely high nitrates.

The commitment shown by resident volunteers and anglers to both important monitoring projects demonstrates that people really care about their local environment and watercourses, which are essential for supporting local wildlife. For further information and to get involved, contact Jennifer Lee at the Yorkshire Dales Rivers Trust ([Jennifer.lee@ydrtr.co.uk](mailto:Jennifer.lee@ydrtr.co.uk)) or visit the trust website ([www.ydrtr.org.uk](http://www.ydrtr.org.uk)).