

Darngaber under observation

On Tuesday 29th April, 'CRIMPer' David Greenslade discovered a very low river score at the site he and Lorna Greenslade monitor monthly. On the Darngaber Burn, a tributary of the River Avon in South Lanarkshire, David found just one Heptageniidae (Flat-bodied up-wing fly), three stonefly and one Baetidae (Olive, swimming up-wing fly). The Clyde River Foundation alerted SEPA to the low score. The normal protocol is for the volunteer to re-sample if there is a trigger level breach and, if confirmed, SEPA will investigate but this sample was particularly poor and the SEPA did a follow-up survey straight away.

Back story...

The sampling site was first registered under the **Clyde Riverfly Monitoring Partnership (CRIMP)** monitoring programme on 25th July 2013. Back then the Clyde River Foundation's biologist Lesley Deans assisted with the first kick sample and helped choose the monitoring site, which corresponded with the **SEPA** monitoring site. The first sample taken in **July '13** has since been analysed in the lab and identified to family level, and this is used to calculate the **Biological Monitoring Working Party (BMWP)** score where individual taxa are scored on their sensitivity to organic pollution.

July 2013 results (First CRIMP sample)

Common Name	Scientific name	BMWP score
Flat-bodied up-wing fly	Heptageniidae	10
Freshwater shrimp	Gammaridae	6
Diving beetle	Dytiscidae	5
Scavenger beetle	Hydrophilidae	5
Marsh beetle	Scirtidae	5
Riffle beetle	Elmidae	5
Crane fly larvae	Tipulidae	5
Blackfly larvae	Simuliidae	5
Olive	Baetidae	4
Freshwater hoglouse	Asellidae	3
Non-biting midge larvae	Chironomidae	2
Worm	Oligochaeta	1
Total BMWP score		56

May 2014 results (SEPA's bankside sort)

Common Name	Scientific name	BMWP score
Flat-bodied up-wing fly	Heptageniidae	10
Stonefly	Leptophlebiidae	10
Stonefly	Capniidae	10
Stonefly	Perlodidae	10
Cased-Caddis	Goeridae	10
Caseless Caddis	Rhyacophilidae	7
Cased-Caddis	Limnephilidae	7
Freshwater limpet	Anyclidae	6
Crane fly larvae	Pediciidae	5
Blackfly larvae	Simuliidae	5
Olive	Baetidae	4
Flatworm	Planariidae	5
Leech	Glossiphoniidae	3
Freshwater hog louse	Asellidae	3
Non-biting midge larvae	Chironomidae	2
Worm	Oligochaeta	1
Total BMWP score		98

SEPA reports...

"Currently we don't routinely sample Darngaber Burn. Records from 2003 showed scores for 87 (spring) and 119 (autumn) for Biological Monitoring Working Party (BMWP). Our recent bankside sample, taken on Friday 2nd May, scored a similar result indicating there is no major problem there at the moment. Both SEPA's bankside sorted sample and David's riverfly data do point towards some enrichment of the burn but not enough at this stage to trigger further investigation. This doesn't explain the exceptionally poor result from the kick sample taken at the end of April. It is possible that perhaps a good/representative sample wasn't possible for some reason. SEPA recommend the volunteer continues sampling and if further poor samples are collected and more signs of enrichment (relatively high numbers of worms and midge larvae, etc.) are noted, we will re-visit the site."



The Darngaber Burn, a tributary of the River Avon

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