



Riverfly monitoring update

March 2015



The Anglers Riverfly Monitoring Initiative gives anglers a way to assess how clean their river environment is from the invertebrate community.

Water quality in any one spot on a river varies greatly day-to-day with weather and flow. Rainfall, for example, dilutes pollutants, washes in debris, or causes sewers to overflow. Invertebrates, however, live on riverbeds for several years and their survival depends on the overall water quality to which they are exposed over time. The invertebrate community therefore indicates the long-term overall water quality.



Image cropped from "Flatheaded mayfly, Heptagenia marginalis" by Bob Henricks and used under Creative Commons license

RESULTS SO FAR...

Over 3 years has given us a pretty good idea of the invertebrates living at 3 key sites. Results show the characteristic invertebrate community and long-term average water quality scores from invertebrate abundance for our sites at:

Ewood Bridge (Arthur Hamer) **4.3** low-moderate

The Valley, Bolton (Dave Vickery, Antony Quinn, Mike France) **7.3** moderate

River Roch (Ian Hedley) **8.0** moderate-high

The samplers have got to know their sites and the invertebrate communities well – there's a lot of satisfaction in getting to know your river ecology.

Samples are taken by kicking river gravels and capturing invertebrates released into the water stream with a net. The Riverfly system uses the abundance of eight major invertebrate groups associated with moderate to high water quality to generate a score. Essentially, the greater the abundance of indicator invertebrates picked up by a 3 minute kick sample the higher the water quality indicated.

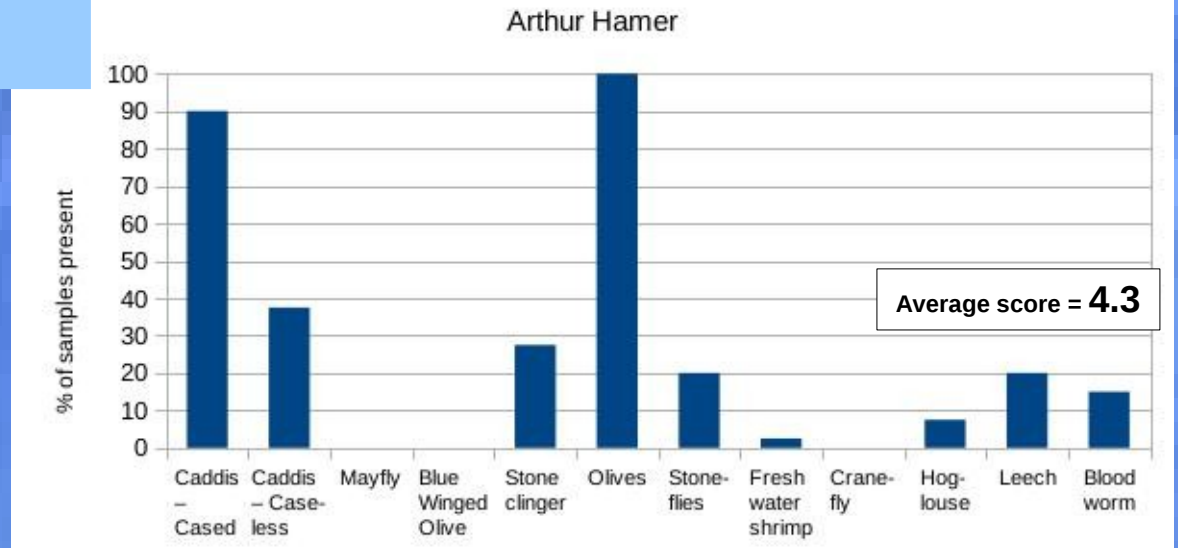
We are also recording the abundance of 4 further groups (cranefly, hoglouse, leeches and bloodworm) that tolerate lower quality water are common on different stretches of the Irwell and tributaries. They are not included in the score, which is based on moderate-high water quality indicators.

IN THIS UPDATE

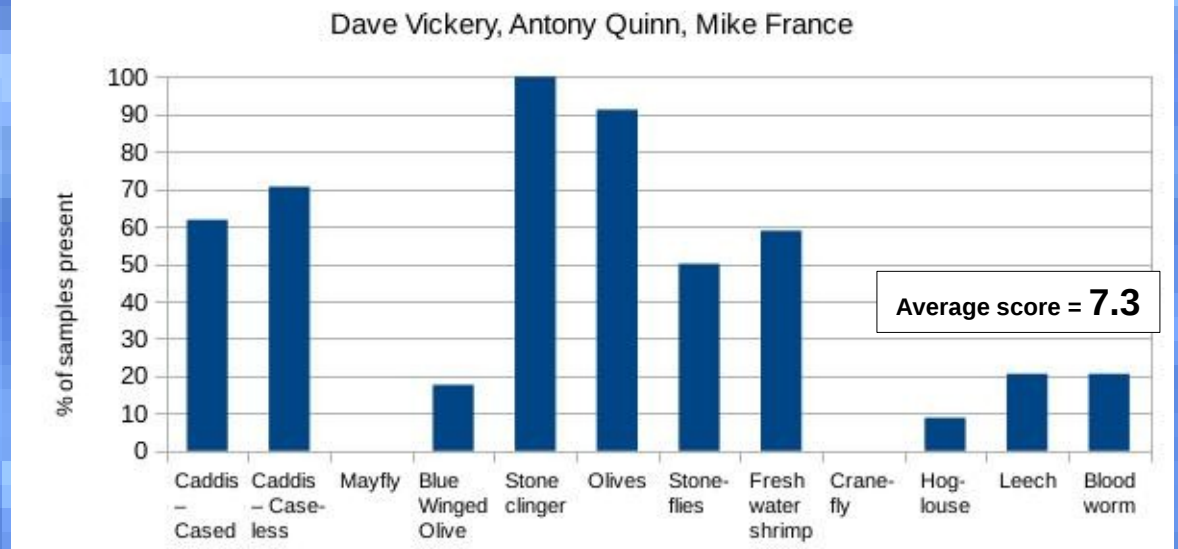
- Characteristic invertebrate communities
- Long-term average scores
- Online mapping and graphs at riverflies.org
- How YOU can get involved: training and equipment to sample YOUR fishing spot.

Characteristic invertebrate community

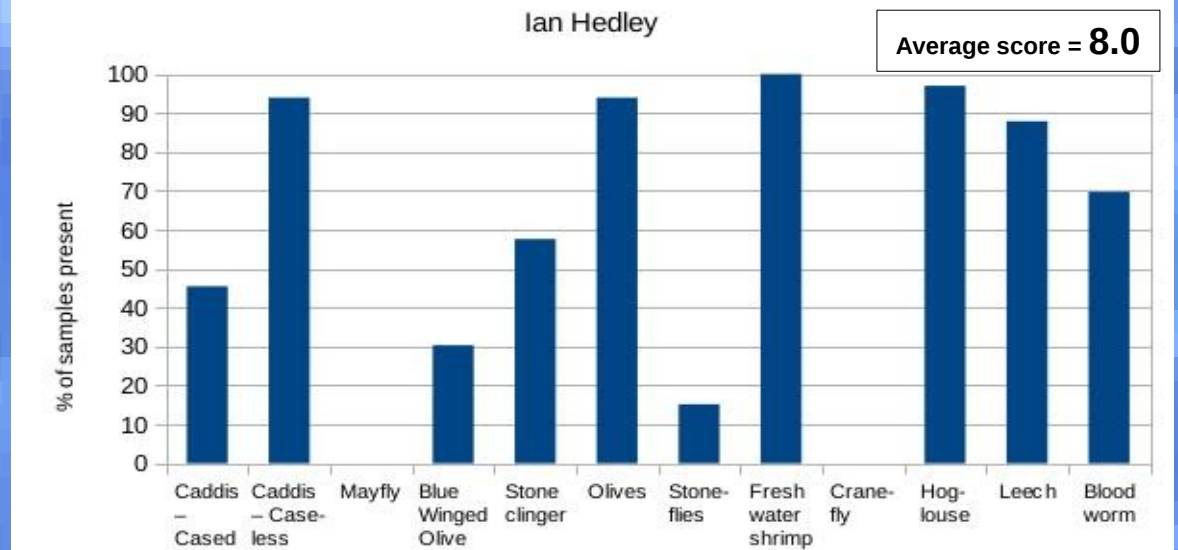
Ewood Bridge - characteristic invertebrate community



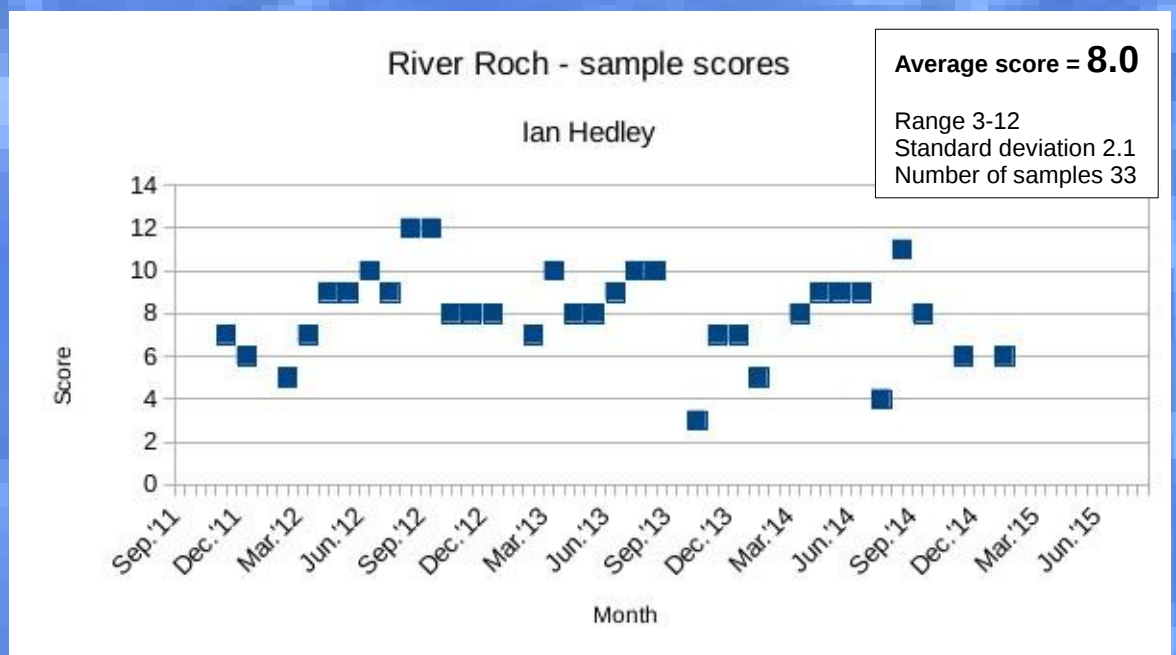
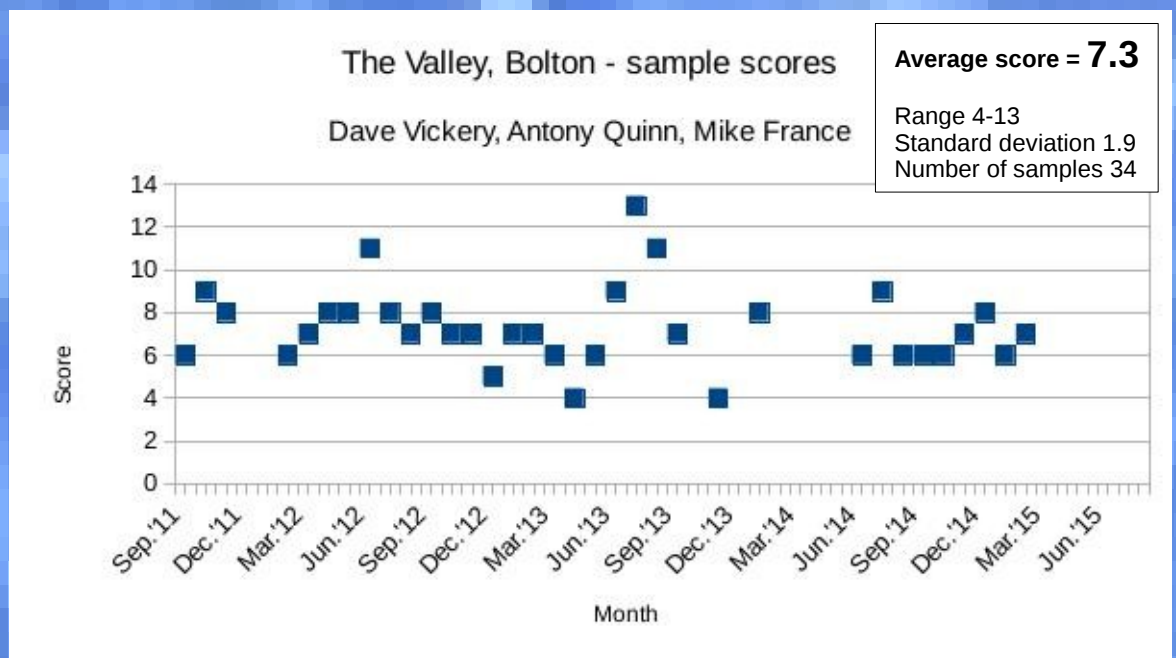
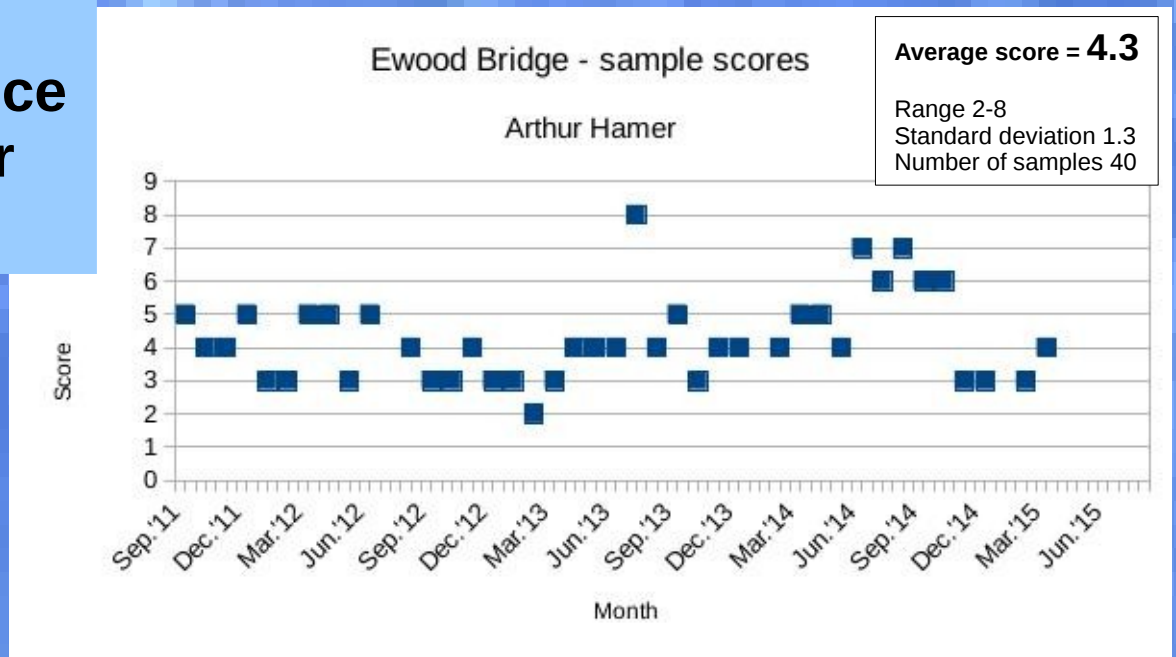
The Valley, Bolton - characteristic invertebrate community



River Roch - characteristic invertebrate community



Monthly scores since September 2011



What next?

Putting our data online for the rest of the Riverfly Partnership community and other angling groups nationwide to see.

Late last year the Riverfly Partnership launched an online database and interactive map & graph service to store and publicise data from groups across the country.

We are in the process of getting our results online at www.riverflies.org/maps.



Image cropped from "Northern case-maker caddis, Pycnopsyche gentilis" by Bob Henricks and used under Creative Commons license

Getting more people involved

People interested in learning how to sample and doing this for their own particular spot are very welcome. The club has sampling kit available.

You will need to attend a **one day course** – we are looking at arranging the next for summer 2015. This will train you in the kick sample technique (important for comparable standards) and ensure you can distinguish the eight invertebrate groups.

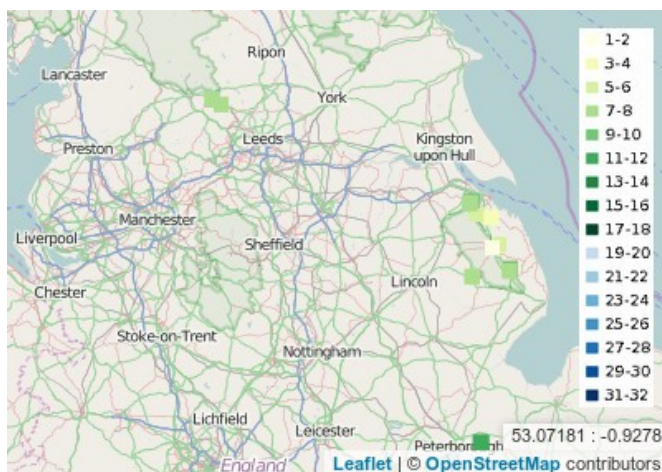
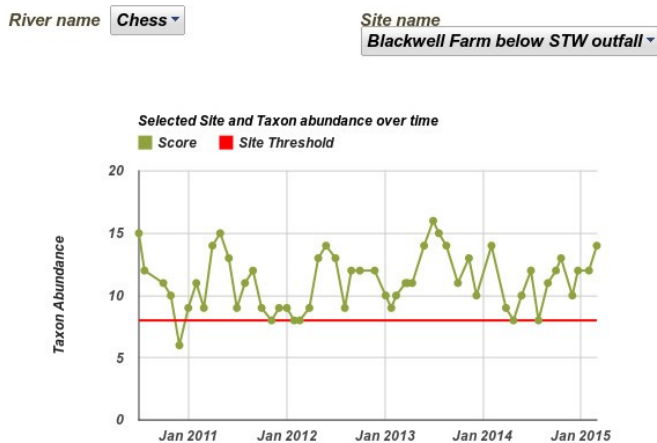
For **your chosen site** (must have suitable habitat and be safe to access the riverbed), you will aim to **sample once each month**.

To sample, you simply stand in the riverbed facing downstream and kick the gravels for 3x one minute periods to dislodge invertebrates that are collected in the sampling net held in the water in front of you. The invertebrates are then washed from the net into your collecting trays and separated according to their group. Approximate abundances are recorded on a template.

You then send your monthly results through to **sampling@salfordfriendlyanglers.co.uk** and we collate the data for the group.

FOR FURTHER INFORMATION

- Speak to **Mike Duddy** at the Salford Friendly
- Contact monitoring coordinator **Adam Moolna** via sampling@salfordfriendlyanglers.co.uk



Riverfly monitoring

