

## “Avon Fishing Association and the Riverfly Partnership”

Talk to the Avon Estuary Forum by John Roberts

16<sup>th</sup> May '17



Riverfly Partnership was first introduced to the River Avon by Lynne Kenderdine of the Devon Wildlife Trust.

Part of the Avon Fishing Association's philosophy to co-operate with agencies to improve and maintain the riverine environment; and to achieve a voluntary catch and release target of 70% or more, using barbless hooks and keeping the fish in the water. Healthy invertebrate population leads to a healthy community of fish and birds.

The Riverfly Partnership is a dynamic network of organisations, representing anglers, conservationists, entomologists, scientists, water course managers and relevant authorities, working together to:

- protect the water quality of our rivers
- further the understanding of riverfly populations
- and conserve riverfly habitats.

Includes DWT, EA, ACA, etc. via the South Hams Rivers Improvement Project (SHRIMP).

This is achieved by:

- providing a forum for raising issues affecting riverflies and developing consensus and collaborative action
- raising awareness of riverflies, and their importance to aquatic conservation and function, amongst the public and decision makers
- involving people in monitoring and recording riverflies
- offering leadership and disseminating expertise in the effective acquisition and interpretation of riverfly monitoring data
- stimulating scientific research to answer key questions about issues affecting riverflies
- improving the conservation status of riverfly species by securing healthy and sustainable populations

- increasing and promoting knowledge about positive management techniques,
- seeking to form and influence debate of current issues.

As well as increasing the availability of this information the Riverfly Partnership will address declines in riverfly populations, including declines in overall abundance and threats to individual species.

The [Freshwater Biological Association](http://www.freshwaterbiologicalassociation.org) (FBA) hosts The Riverfly Partnership on behalf of the Partners as part of the FBA's active engagement in the management and conservation of the aquatic environment.

## Monitoring

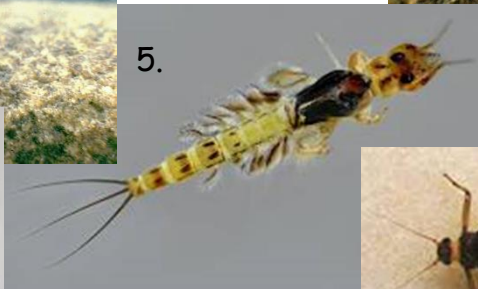
River is monitored once a month, at four different sampling sites:

1. Kerry Downs, nr. South Brent
2. Lower Gara, below bridge
3. New Mill Bridge, down from Loddiswell
4. Knapp Mill



Eight different groups of invertebrates are sorted and counted, with counts logged into the Riverfly website [www.riverflies.org](http://www.riverflies.org)

1. Freshwater shrimps
2. Cased caddis fly larvae
3. Uncased caddis fly larvae
4. Stonefly nymphs
5. *Ephemeroptera danica* nymphs (mayfly)
6. Flat bodied nymphs (mayfly)
7. Olive nymphs (mayfly)
8. Blue winged mayfly nymphs (mayfly)



Sampling involves three 1-minute kick samples (disturbing the bed by shuffling with a fine net held downstream) and 1-minute picking up stones.



The invertebrates collected are sorted into separate group trays, counted, recorded and then returned to the river.

The individual groups are scored by their abundance and then all 8 groups are summed together to give an 'Anglers Index Score' which is then reported to the Riverfly Project.

The most recent Angler's Index Scores for the River Avon have been 8 at Kerry Downs & 16 for Knapp Mill - both are considered encouraging. For Kerry Downs and Gara the 'required level' is 5 or the others 6. If levels fall below this, the EA are informed and a pollution check is carried out within 24 hours.

Devon Avon Riverfly Project

Location: New Mill

Date: 26/4/17

Team Leader: Jrjmc

Abundance Scores

Abundance	Score	Estimated number
1-9	1	Quick Count
10-99	2	Nearest 10
100-999	3	Nearest Hundred
Over 1000	4	nearest 1000

Recording

Species	Abundance Score	Number
Cased Caddis (Trichoptera)	13	2
Uncased Caddis (Trichoptera)	7	1
Ephemeroidea (Mayfly)	—	—
Heptageniidae (Flat Bodied)	57	2
Baetidae (Clives)	120+	3
Blue Winged Clives (Ephemeroidea)	3	1
Stoneflies (Plecoptera)	11	2
Shrimp (Gammarus)	12	2
Angler's Index Score		13

N.B. Please refer to your Riverfly monitoring handbook for details of the sampling procedure.

All the groups of invertebrates surveyed are quite sensitive to pollution, so their relative abundance are a good indicator of the water quality. The catch of fish is neither a good indicator of water quality or the fish population within the river.

John has a saying that the "River owes the anglers nothing; we owe it everything".

## Questions

Does acidity from the catchment affect the score? Yes, mainly on the upper reaches and the outflow from the dam.

When do the fish run? Sea trout - mid April to October; Salmon - July to November spawning in Glaze Brook

Can water quality be gauged by water weed? Probably not as plants are less sensitive to oxygen levels and some positively thrive in high nutrient levels.

Riverfly website - [www.riverflies.org](http://www.riverflies.org)

## River flies and their interest to anglers

### Mayfly nymph



### Mayfly



### Caddisfly



### The fish!



Brown or 'sea-trout' - all are strictly brown trout and hatch in rivers - in some larger rivers the fish may spend their whole lives in the river but in smaller rivers such as the Avon they migrate to the coast and are 'sea trout' until they migrate back to spawn.