

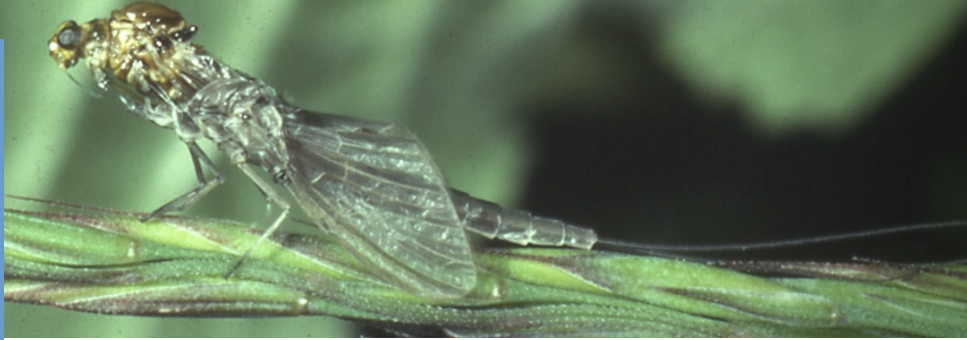


# Hampshire Avon

RIVERFLY CENSUS CONCLUSIONS

## OUTCOMES & OBSERVATIONS

WHAT THREE YEARS OF SCIENCE  
HAS TOLD US LOCALLY

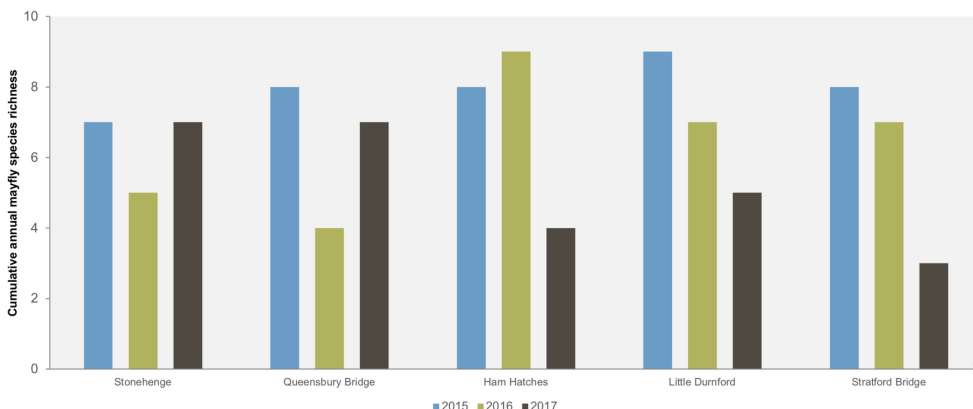


### WHERE HAVE THE BLUE-WINGED OLIVES GONE?

The survey unearthed a surprising decline in Blue Winged Olive flies, a crucial part of the river food web and a supposed staple in any chalk stream.

Other commissioned research by us showed the sensitivity of BWO eggs to phosphate and sediment. We believe these stressors are responsible for the shortage in these essential insects. Loss of such an important species definitely indicates a cry for help in the Avon.

### MISSING MAYFLIES



Cumulative annual mayfly species richness has been extremely variable over the three-year survey period, with no sites showing consistency in numbers. Richness in 2015 was the highest out of the three years, but no site reached 10 mayfly species, the chalk stream benchmark we recently influenced on the nearby Test and Itchen rivers.

### GETTING A HANDLE ON THE 'P' PROBLEM

Phosphates (P) in the river show a pattern of increasing levels upstream. There are high contributions of P from the upper catchment, from a combination of agricultural diffuse pollution, effluent discharges and some natural loading.

P appears to be carried into the river at Stratford Sub Castle in the early part of the year with phosphates persisting for most of the year.

Amesbury and Ratfyn sewage treatment works P levels both have increasing upward trends.

### UNPICKING CHEMICAL SIGNALS

Chemical impact (from pesticides/herbicides/pharmaceuticals), as identified by the biometric SPEAR, was more pronounced towards the end of the survey period.

### SO MUCH MORE THAN MONITORING

Apart from weekly surveys at Stratford Sub Castle, EA monitoring is declining. In-river monitoring below sewage treatment works is also sparse.

Our initial 3-year biological survey may be over, but without continued intuitive monitoring we will never have a good enough understanding to help our rivers in the bespoke ways they need.

To see the full results and learn more about the science behind the S&TC Riverfly Census visit our website

**THIS IMPORTANT  
WORK CANNOT  
CONTINUE WITHOUT  
YOU**

**PLEASE CONSIDER JOINING AS  
A MEMBER OR DONATING SO  
WE CAN CONTINUE WORKING  
ON A SUSTAINABLE FUTURE  
FOR OUR WILD WATERS**