











# Wigglesworth RiverBlitz

### Overview

On Sunday 16th October we held a fantastic RiverBlitz event in the Wigglesworth catchment, collecting water chemistry, habitat quality and biological community data across 10 freshwater sites. With the help of 18 wonderful volunteers, we collated a comprehensive picture of water quality across the catchment, the results of which have already helped us to direct priorities for future works such as farm advice and habitat improvements in the area.

# Water quality

We utilised water samples, testing water temperature as well as levels of organophosphate, nitrates and nitrites, alongside aquatic invertebrate samples, to give us a indication of water quality at the sites in Wigglesworth.

From the graph below, we can see the site scores based on the Extended Riverfly scoring system. Sites 1 and 10 performed most poorly (both ARMI scores of 5), whilst **Site 7** scored the best with an Extended Riverfly **score of 37** (ARMI score of 10). Sites 3, 5 and 6 were not far behind, all scoring in the 30s (ARMI scores between 8 and 12).

Across the sites, our most abundant group was **freshwater shrimp**, our rarest group was **blue-winged olive** (mayfly), and our highest scoring group was the **stoneflies**.

# 10 88 7 6 5 5 3 10 15 20 25 30 35 Water Quality Score

### A note on water chemistry

Nitrate results were low across all sites, between 0 and 0.5 ppm. Nitrites ranged between 0 and 0.15ppm, with the exception of site 8, which gave a result of 10ppm. Phosphates were more variable, but generally low according to Water Framework Directive standards.

Rarest



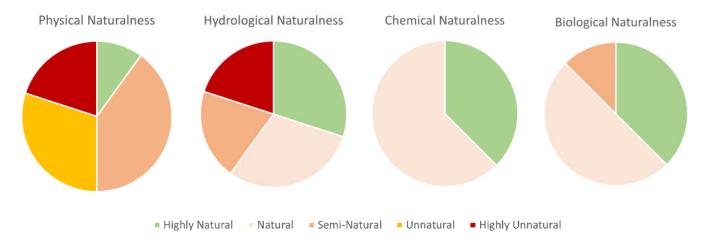


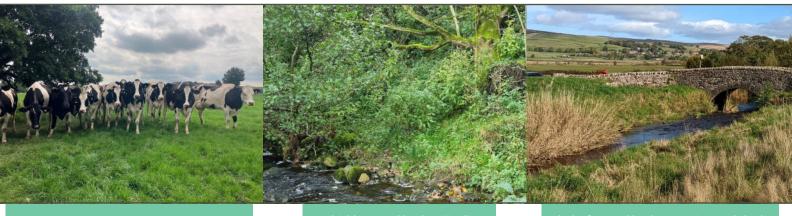
Highest scoring group



# Habitat quality and naturalness

The data collected relating habitat features across the catchment reconfirmed our understanding that the Wigglesworth catchment has been heavily modified through agricultural land use. The results from our citizen scientists recognised specific issues with stock access to water bodies, bank poaching, and a lack of riparian vegetation.





# What's next?

With the information gathered from this event, we have already started to plan appropriate farm advice within the area to tackle some of the issues highlighted by the data. We hope to replicate this event across a number of waterbodies within the Ribble catchment as part of the CaSTCo project, producing evidence packs that will identify key issues in the catchment affecting water quality. This will not only allow us to refine the RiverBlitz methodology, but also identify priority areas for work and tackle issues where we can.

## Handy resources

Want to know more? Check out the Wigglesworth RiverBlitz Results excel sheet for full details from the event.

For more on the methods, visit riverflies.org and priorityhabitats.org. To stay in the know about our upcoming events, visit ribbletrust.org.uk and follow us on all social channels.

