

Duddel Brook RiverBlitz

Overview

On Sunday 24th September we held a fantastic RiverBlitz event in the Duddel Brook catchment, collecting water chemistry, habitat quality and biological community data across 10 freshwater sites. With the help from over 20 wonderful volunteers, we collated a comprehensive picture of water quality across the catchment, the results of which will inform focus for farm advice work and habitat improvements in the area.

Water Quality (Biological)

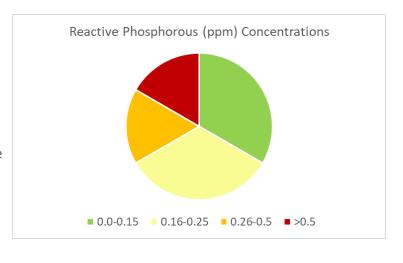
Our volunteers performed 3-minute kick samples at each sites and identified all invertebrates to an Extended Riverfly standard. This allowed an accurate interpretation of Water Quality. From the graph (right), we can see the majority of sites in the Duddel brook catchment scored 'moderate' water quality, with 2 sites being 'good' (WQ >25). Riverblitz results can prompt investigate monitoring to identify issues at sites with poor scores.



Across the sites, our most abundant group was **freshwater shrimp**, our rarest group were **weighted case maker's (cased caddisfly)**. And the highest scoring group found were **stoneflies**.

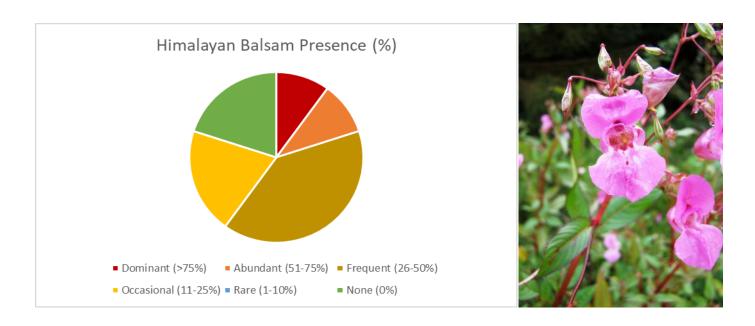
Water Chemistry

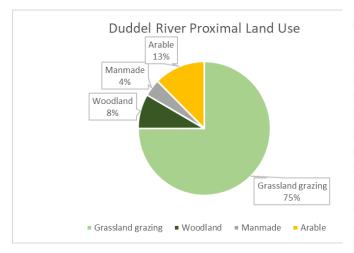
As well as invertebrates, we tested water for orthophosphate levels (Part per Million). The Environment Agency identifies phosphate in the Duddel to be an RNAG (Reason for Not Achieving Good ecological status). Our RiverBlitz data confirms this issue, with most sites exceeding the Water Framework Directive threshold of 0.1, and allows RRT to pinpoint potential sources of Phosphate pollution.

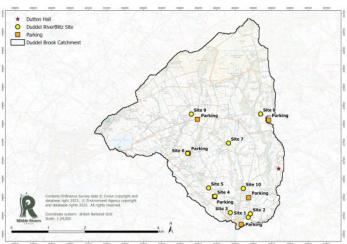


Habitat quality

The data collected relating habitat features across the catchment showed over **70% of sites had livestock access**, and **30% with poached riverbanks**. Land use data collected on the day reaffirms Stock beck has high proportions of agricultural land use. Issues with bank erosion, Himalayan balsam presence, and lack of wooded river corridors were also highlighted. With problems now identified to a site specific level, action can be put in place to restore river health and monitor ongoing issues.







What's next?

RiverBlitz's have proven an effective method to capture a wide scale snapshot of catchment water quality with sites being strategically located to collect data from multiple tributaries. All this in a very short period of time thanks to our amazing volunteers. We have been refining the RiverBlitz methodology after each event, with input from volunteer feedback, and aim to continue RiverBlitz events into the following year. Eventually, building up a wide dataset for the Ribble catchment as a whole, identifying priority areas for our improvement works.

If you like to get involved in our events, visit <u>ribbletrust.org.uk</u> and follow us on all social channels.







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