



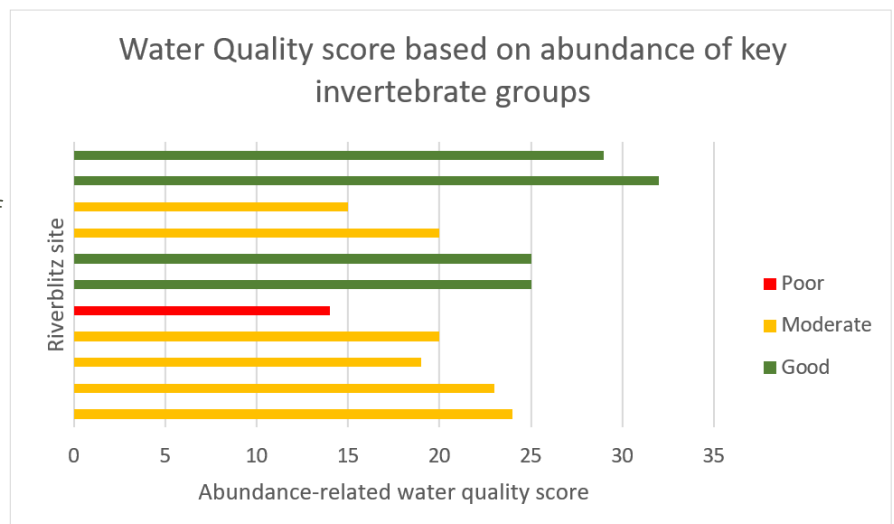
Skirden Beck RiverBlitz

Overview

On Saturday 23th March we held a fantastic RiverBlitz event in the Skirden Beck catchment, collecting water chemistry, habitat quality and biological community data across 11 freshwater sites. With the help from over 40 wonderful volunteers, we collated a comprehensive picture of water quality across the catchment, the results of which will inform focus for farm advice work, habitat improvements, and further monitoring.

Water Quality (Biological)

Our volunteers performed 3-minute kick samples at each site and identified all invertebrates to an Extended Riverfly standard. This gives a good indication of water quality (WQ). From the graph (right), we can see the majority of sites in the Skirden Beck catchment scored 'moderate' water quality, with 4 sites being 'good' (WQ ≥ 25). Riverblitz results can prompt investigative monitoring to identify issues at sites with poor scores.

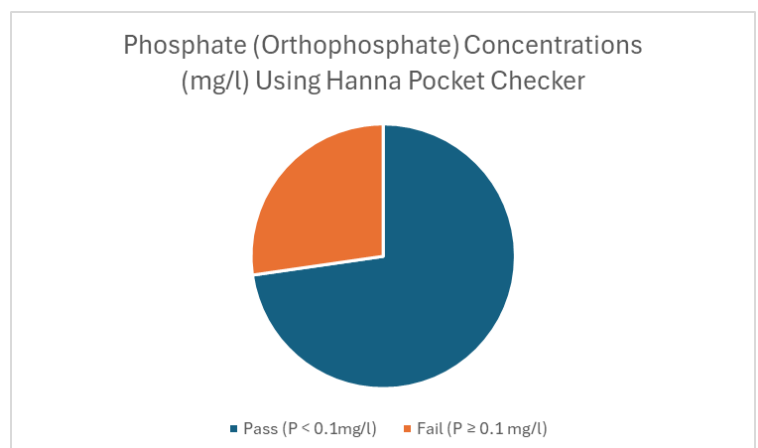


Across the sites, our most abundant macroinvertebrate group was **olive's (mayflies)**, our rarest group were **weighted case maker's (cased caddisfly)**. And the highest scoring group found were **stoneflies**.

Note: Scoring grades are arbitrary, and derived from comparison of scores gained on the day. Note also that the site numbers have deliberately not been revealed.

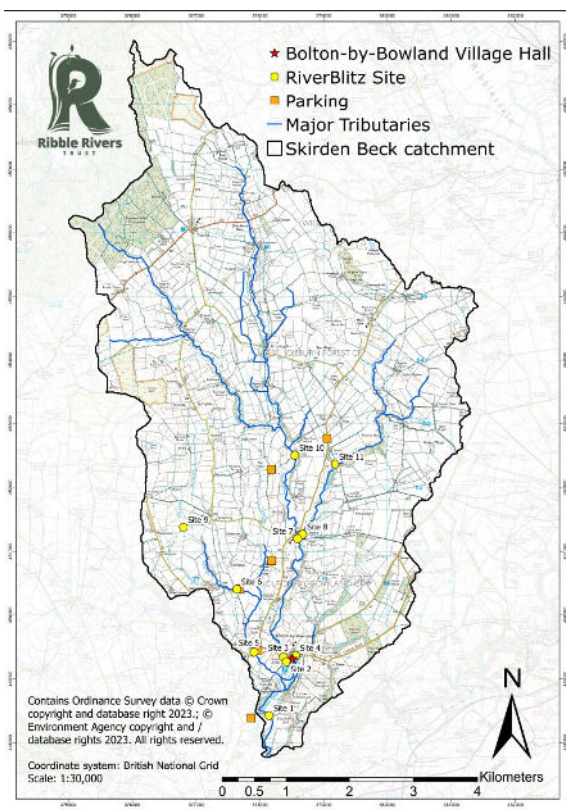
Water Quality (Chemistry)

As well as invertebrates, we tested water for orthophosphate levels using Hanna Pocket Phosphate Checkers, which helps the RRT team to pinpoint potential sources of phosphate pollution, which can cause issues for river health. Our RiverBlitz data showed most sites on the day 'passed', as their phosphate levels were under the threshold that the Water Framework Directive deems to be unacceptable.



Water Quality (Chemistry)

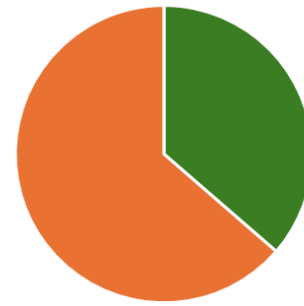
Water Rangers kits allow communities with varied scientific experience to preform quick water chemistry tests. Water Rangers kits were used during the Skirden Beck RiverBlitz to test water samples for phosphate and nitrate pollution, and a multitude of physical parameters (pH, temperature, conductivity) and chloride. Additionally, we tested for E.coli CFU (coliform forming units) and data revealed the majority of sites in the catchment measured above 900 cfu/100ml meaning they exceeded the threshold for safe bathing water quality.



What's next?

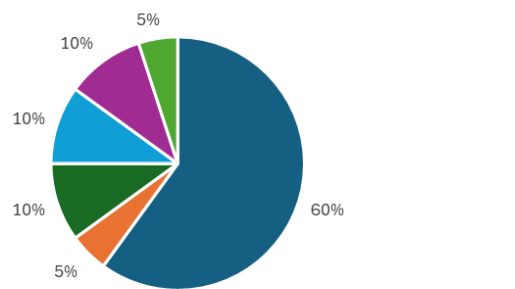
RiverBlitz have proven an effective method to capture a wide-scale snapshot of catchment health, with sites being strategically located to collect data from multiple tributaries. All this in a very short period of time thanks to our amazing volunteers! We have been refining the RiverBlitz methodology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

E.coli (CFU/100ml) at Sites across Skirden Beck



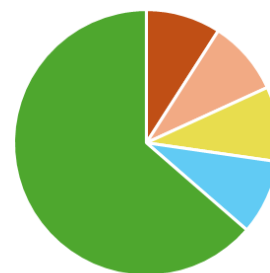
■ Good/Sufficient (EC: ≤900 cfu/100ml) ■ Poor (EC: >900 cfu/100ml)

Land Use (%)



■ Grazing grassland ■ Woodland ■ Man-made ■ Arable ■ Urban ■ Meadow (Ungrazed)

Himalayan Balsam Presence (%)



■ Abundant (51-75%) ■ Frequent (26-50%) ■ Occasional (11-25%)
■ Rare (1-10%) ■ None (0%)

Habitat Quality

The data collected relating to habitat features across the catchment revealed high proportions of agriculture, with **grazing grassland** to be the **predominant land use (60%)**, followed by manmade (10%), arable (10%) and urban (10%). Issues with bank erosion were highlighted with **70% of sites having earthy cliffs** and 10% of sites having 'poached' banks. Positively, **73% of sites noted tree presence** and **Himalayan balsam was absent from 64% of sites**, with only 9% of sites surveyed having abundant balsam.

If you would like to get involved in more events, visit ribbletrust.org.uk or follow us on our social channels.



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