

How-to Guide

Thank you for taking part in this RiverBlitz event and helping BART and our partners monitor the health of our freshwater environments. The data you will collect during the RiverBlitz project will provide a snapshot of water quality and habitat type of your chosen site. This data will be added to our RiverBlitz platform which visually demonstrates six years of RiverBlitz data, whilst providing options for the user to view trends in river health. The data will help to identify at high-level, water quality "pinch points", habitat features and areas for further investigation, as well as raising awareness of our local watercourses amongst stakeholders throughout the Bristol Avon catchment.

Please read through this document before heading out to your chosen site to ensure you are aware of the safety measures and understand how to use the testing equipment.

Before setting off, make sure that you have:

- Permission to access the waterbody from the landowner, or take your sample from a public right of way
- Informed someone where you are going, and when you plan to be back. Or even better, take them along with you (we recommend working in pairs as a minimum if possible)
- A mobile phone to call for help if needed and details of the nearest medical facility and how to get there
- Appropriate outdoor clothing, footwear and protection e.g. sun cream or a raincoat
- Checked the weather conditions and forecast and ensured you will be able to safely collect your sample

When you arrive at your chosen site:

- Ensure it is safe to collect your sample and make yourself aware of any potential hazards at each sampling location. Do not sample if it is not safe to do so
- Find a location where you can safely access the watercourse or collect your sample from the bank using a receptacle (using a receptacle is recommended)
- Keep a safe distance from animals and avoid coming into contact with harmful plants such as nettles or giant hogweed

While carrying out your tests and making observations:

- Use a receptacle with a long handle or pole attachment to avoid needing to enter the watercourse. Make sure the receptacle is clean and swilled out with clean water before use
- Ensure you have a firm footing on solid ground
- If you need to enter the watercourse, only do so up to ankle height
- Avoid trampling on plants or disturbing wildlife
- Wear gloves to avoid direct contact with your sample water and the potential transmission of waterborne contaminants

After testing:

- Wash your hands thoroughly or apply hand sanitizer
- Keep or recycle the testing equipment if applicable
- Upload your data to the RiverBlitz website (more detail below)
- Follow the 'Check, clean, dry' biosecurity method if your equipment, such as wellies and sampler, have accessed the river.



How to gather your RiverBlitz data

Ensure you have access to the <u>RiverBlitz platform</u> which is where you will need to update your data. You may wish to print the data entry form before you head out so you can record your results in the field and upload them when you have access to the online platform. This option will also reduce the risk of dropping electronic devices into the water!

Fill in your details and details of your chosen site:

- Give your site a name that is familiar to you or local people. Try to use the same name as previous RiverBlitz surveys if you have gathered data here before.
- Record your location. If using the RiverBlitz website on your device, click on the location button to find your location, or make a note of the lat/long on your data entry form, using Google maps.

Take a photo to go with your data:

Include as much of the watercourse, riverbanks and surroundings as possible.

Make the observations requested on the data entry form:

- These questions help us to build an overall picture of your site and will help us assess the health of the watercourse and its wider environment.
- Stand in one place while you make the observations and record what you see from there.

Nutrient tests:

- Collect your sample water, facing upstream if you are collecting your sample from moving water. Try not to disturb the riverbed when you are collecting your sample, as this may impact the accuracy of the test results.
- Rinse out the sample container twice with the river water at your sampling location and on the third time, fill it ready for testing.

Nitrate testing:

- 1) Dip a strip into the water for 1 second and remove. **Do not** shake excess water from the test strip.
- 2) Hold the strip level, with pad side up, for 30 seconds.
- 3) Compare the test pad to the colour chart. Record the range that best correlates with the pad colour. The nitrate test will show up on the end pad (the end-most of the two).

Phosphate testing:

- 1) Fill the test tube to the 10ml line.
- 2) Gently bend the test strip in half (do not fold) with pads facing inward. Place strip inside the test tube cap.
- 3) Put the cap back on the test tube and invert slowly 5 times (15 seconds), allowing the bubble to go from the top to bottom and bottom to top.
- 4) Immediately remove the cap and test strip. Place the bottom of the test tube on a white boxed area of the colour chart. Immediately look down through the open test tube and compare water colour to the colour chart. NOTE colour will continue to change so make sure colour is recorded after 15 secs.



5) Do not pour coloured water back into river or into surface water drain, please dispose of this into your foul drain (toilet or sink).

Upload your results on the 'Enter Results' tab on the <u>RiverBlitz platform</u>. You will need to enter your unique key code for each test which can be found in your registration email. **It doesn't matter which code you use for which test.**

Please contact <u>riverblitz@bristolavonriverblitz.org</u> with any queries. Thank you for taking part.

Reusing, recycling and composting your kit

REUSE: Colour cards and sample container

We hope you will take part in future RiverBlitz events so please hold onto these for next time.

RECYCLE: Nitrate and phosphate test strips

Cut off the pad of the strip and dispose, recycle the rest of the strip in your paper recycling.

COMPOST: Protective gloves

These are made from plant-based PLA, which can be placed in your food wate bin to be taken for industrial recycling