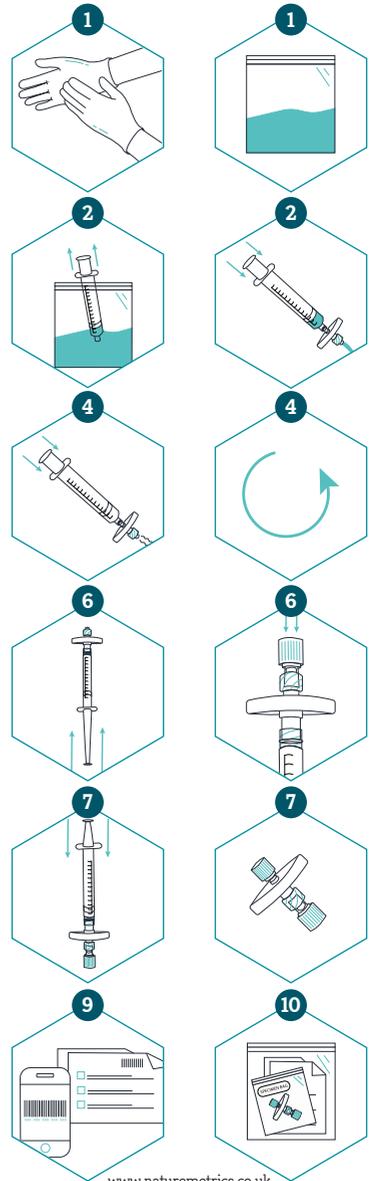


# Testing the Water eDNA survey

## How to collect your eDNA sample

- 1 Put on the gloves provided.** Use the large sample bag to collect your subsamples from the waterbody (see notes on how to sample standing and running water). Minimise contact with the water during collection. Seal the bag and make sure the water is well mixed by shaking for 20-30 seconds.
- 2 Draw up 100 ml of water from the sample bag into the large syringe.** Attach the syringe to the filter inlet (narrow end). Press the plunger to push the water through the filter.
- 3 Repeat step 2** until all the water has been filtered or the filter clogs. Make a note on the sampling datasheet of the total volume processed.
- 4 IMPORTANT:** Detach the syringe from the filter, but this time pull back the plunger to fill the syringe with air. Reattach the filter and push the air through to expel any water trapped inside the filter. Repeat several times to remove as much water as possible.
- 5 Uncap the small syringe** (already filled with preservative solution) and twist it onto the filter inlet. Do not discard the Luer Lock cap, as it will be needed in step 6.
- 6 Hold the filter** so that the outlet (wide end) points upwards. Carefully and slowly press the plunger to push the preservative solution into the filter. Stop when the first drop can be seen emerging from the filter outlet, but do not remove the small syringe with preservative solution. Cap the filter outlet using the Luer Lock cap that was on the small syringe in step 5.
- 7 Invert the filter** so that the filter outlet points down, and slowly press the plunger to expel the rest of the preservative solution. The entire volume of preservative solution should be added to the filter and the small syringe should be empty. Detach the small syringe whilst keeping the plunger depressed and cap the filter inlet with the separate Luer Lock cap.
- 8 Place the filter** inside the specimen bag and seal.
- 9 Complete the sampling datasheet** and FHT recording form (PTO) and submit the information online using the WaterNet Data Hub [freshwaterhabitats.org.uk](http://freshwaterhabitats.org.uk).
- 10 Place the bagged filter** and sampling datasheet in the return pre-paid envelope provided and return to the lab for analysis.



[www.naturemetrics.co.uk](http://www.naturemetrics.co.uk)



[freshwaterhabitats.org.uk](http://freshwaterhabitats.org.uk)



# Recording your Testing the Water results

**Surveyor name(s)** - your name and anyone with you collecting the sample e.g Anne Smith, John Smith.

**Recording group** - if you are collecting results on behalf of a group, enter the name e.g. Wild About Cheshire.

**Email** - Please supply your email address to receive the online results for your survey.

**Grid reference** 8 figure e.g. SP 1234 1234 (or postcode / what3words)

If you don't know this, make a note of the waterbody location, so you can find the site later on a map. Go to the the **WaterNet Data Hub** page on our website for more information.

**Date**

**What type of waterbody did you sample?** (please tick one).

Garden pond  Other pond  Lake  Ditch  River  Stream

Other (please state)

e.g. cut-off channel, canal, spring or well.

**Name of waterbody** e.g. Collier Pond, or pond in Stubbs Wood (if pond name not known).

**eDNA kit number** (This is the number under the bar code on the eDNA kit sampling datasheet).

**Water volume filtered (ml)**



## Sampling standing water

e.g. ponds, lakes and slow flowing ditches

- In standing waterbodies such as ponds, eDNA does not mix well due to the absence of flow. Multiple water samples are key to capture the eDNA present. By sampling in as many areas as possible, you considerably increase your chance of collecting DNA successfully. Walk around the pond, to identify areas where you can access safely.
- Collect up to 20 water subsamples, spread out evenly around the pond edge. The samples should be taken from both open water and vegetated areas if present. If you can't access all areas of the pond (most ponds!), spread the samples out as best you can.
- If you are sampling a very slow flowing ditch, aim to collect subsamples from as many accessible locations as possible along its length.
- If you are sampling a lake take subsamples from the inflow and outflow (if there is one) and then at 10 metre intervals around the lake perimeter.
- Aim to collect between 1 and 2 litres of water.

## Sampling running water

e.g. rivers and streams

- In a river or stream, eDNA can be well-mixed depending on local environmental conditions, but flow means that eDNA can be transported hundreds of metres from its source, so multiple sampling locations along the length of the stream/river are recommended.
- In small streams or rivers, at least three sampling locations should be identified with subsamples taken at each sampling location. Start at the most downstream sampling location, to avoid collecting your own DNA, and work your way upstream. Aim to collect between 2 and 3 litres of water.

Submit info online using the FHT WaterNet Data Hub on our website [freshwaterhabitats.org.uk](http://freshwaterhabitats.org.uk)

N.B. Additional sampling information may be required for specific FHT projects. Refer to information provided by Project Officer.