

Health & Safety Guidance Notes

This guidance note provides an outline of best practice in terms of health and safety when collecting your Clean Water Samples. This includes the use of the PackTest nitrate and phosphate water testing kits and considers the risks you should be aware of when collecting samples from a variety of freshwater habitat types – incl. ponds, lakes, rivers, streams and ditches

In an emergency please contact the emergency services - 999

Your responsibility

Whilst taking part in the Testing the Water survey you have the responsibility of ensuring that you undertake the sampling considering you own health and safety and the health and safety of others around you. You should not put yourself in a position that could place you, or others, in danger. You are under no obligation to participate in or continue with the survey if it is not safe to do so. You are under no obligation to visit a particular site, even if the survey organisers have suggested it. If you have any health and safety concerns about the survey, you should stop the survey and raise your concerns with Freshwater Habitats Trust info@freshwaterhabitats.org.uk.

Risk assessment

Before undertaking the Testing the Water survey, you should consider the health and safety hazards associated with the site where you plan to collect your water sample and whether individual circumstances or any medical conditions expose you to particular hazards. Generic areas of risk when undertaking the Testing the Water survey is given below. However, you should identify the potential risks specific to the site you are visiting and apply practical precautions to minimise the level of any risks. You should also pass this health and safety information on to anyone else who is helping you undertake the Testing the Water survey.

Access permission

You may not need permission to collect a water sample where the pond, river, lake, stream or ditch can be accessed from a public footpath, or where the waterbody is within open access land. If you can contact the landowner to explain what you are doing and why, this is always the best option. Do not continue with the survey if access permission is refused. In all cases, please abide by The Countryside Code www.countrysideaccess.gov.uk.

Parking

When visiting a site take care to park cars sensibly, preferably off-road, and do not block entrances. A notice in the car window can be useful to alert locals to your purpose and contact details (a car windscreen sign can be downloaded from our website).

Mobile phones

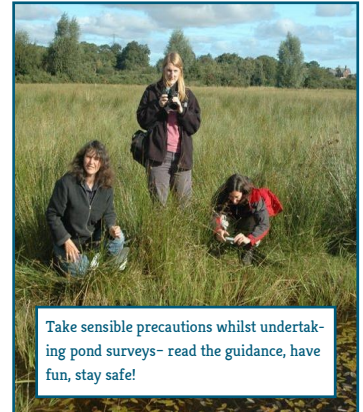
It is advisable to carry a mobile phone, as they may be useful in case of an emergency. Please note that mobile phones may not work in some remote areas. In case of an emergency you can use either the European Emergency Number (112) or 999 (see www.eena.org for more information). 112 can be dialled even if the keypad is locked.

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Collecting a water sample

Freshwater habitats can be dangerous places with deep water, steep and slippery banks, unsafe floating mats of vegetation and fast flowing water. Any survey near water includes a serious risk of injury or drowning. You should not enter the water to collect a sample for the Testing the Water survey, use a small container, to collect a water sample from the bank.

- Only access the water from a safe point on the bank, ensure your footing is secure and do not overstretch to reach the water.
- Deep silt and thick mud can build up around the edges of ponds and lakes, Test the bank edges before stepping on them.
- Rivers and ponds may be surrounded by dense vegetation which can be a trip hazard, or cause abrasions to the body, face and eyes. Don't bend or kneel in areas of known sharp grasses or plants.
- Approach rivers where the flow is slow (e.g. near a bridge or from the shallows).
- Never attempt to collect a water sample from rivers which are swollen following heavy rainfall.
- Consider attaching a cup to a pole to reach difficult places. If you take a sample using a cup and pole, make sure you use a small cup, rather than a bucket. Water is heavy and the additional weight on the end of the pole could pull you in. If using a cup and pole, watch out for overhead hazards (such as telephone or power lines).
- Do not sample from areas that present a particular danger (i.e. steep slopes, cliffs, unstable banks and rivers during flood).
- We recommend that you should always undertake your Clean Water for Wildlife survey in pairs.



Lone working Code of Practice

Always leave a note of your whereabouts with a responsible person (buddy system). For health and safety reasons we recommend that you should always undertake your Testing the Water survey in pairs. If you find it necessary to carry out a clean water survey alone or you are accompanied, but working in a remote place, please ensure you have left the following details with a responsible person and make sure they know how to raise the alarm if you do not return by your base when expected.

Details should include: date and time of departure, method of travel to and around the survey site, proposed itinerary, expected time of leaving the site and return to base, and vehicle identification details. The person to whom these details are given should be told who to contact if you do not return and at what time to raise the alarm.

Under 16s

Under 16s can take part in the Testing the Water survey if they are accompanied by a responsible adult. There is no age limit on taking part in the Testing the Water survey, but we would advise that parents or guardians inform their child of the associated risks and accompany them when collecting a water sample. If your child is taking part in the Testing the Water survey as part of a school or youth group activity, parents or guardians will be asked to sign a Parental Consent Form, stating that you agree to your child undertaking the Testing the Water survey and have made them aware of the associated risks.

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Care in handling the Pack Test nitrate and phosphate kits before and after use

Both the nitrate and phosphate kits contain a small amount of reagent powder which reacts with the water sample to produce a colour change. The kits are low risk because the reagent is contained within the tube. It is unlikely to come into contact with the user if sensible precautions are taken and the instructions given in the Testing the Water survey leaflet are followed.

If the reagent powder does come into contact with the user before the water sample is taken, or after dilution, the following first aid measures apply:

- Eye contact: Immediately rinse eyes with water for at least 15-20 minutes. Seek medical attention.
- If swallowed: Do not induce vomiting. Give one or two large glasses of water to dilute and seek medical attention.
- Dust breathed in: Move to fresh air. You may need to seek medical attention if symptoms such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest occur.
- Skin contact: Flush the skin with water. No further attention should be required. If redness or irritation does develop, seek medical attention.

For your information the main reagents in the PackTest kits are as follows: nitrate kits contain zinc and naphthylethylenediamine; phosphate kits contain enzyme and 4-aminoantipyrine.

General precautions

Check weather reports before you go out and wear appropriate clothing e.g. wellington boots and long-sleeved clothes and trousers to prevent scratches and nettle stings. In hot weather use sun protection including a wide-brimmed hat and sun screen. Make sure you drink plenty of water and take food if out for long periods of time. Avoid or abandon outdoor activities in bad weather.

Difficult terrain and traffic

Take special care when carrying out the Testing the Water survey along watercourses, cliff edges, or in areas that contain boggy ground, reed beds, loose rocks or areas with underground burrows (e.g. badger and rabbit holes) often found along field edges. Do not cross potentially hazardous sites, such as quarries, ravines and railway lines. Please heed warning signs and do not enter private (non-access) land that has been deliberately obstructed by fencing or barbed wire. Take care when crossing roads or sampling near roads or bridleways. Always be alert when walking in areas of poor visibility that may be used by motorbikes or horses. Wear bright clothing to ensure that you can be seen.

Livestock and agricultural machinery

Take special care when entering areas with livestock, especially cattle, rams and horses. If livestock are likely to be present on the site do not take a dog with you to do the Testing the Water survey. Do not enter fields containing bulls. Rutting deer can also be aggressive in the autumn. Avoid undertaking the Testing the Water survey in close proximity to working agricultural machinery or forestry operations.

Human confrontation and dogs

Consider your personal safety when taking a Testing the Water survey within the vicinity of known or likely trouble spots. Avoid confrontation with landowners, land workers or members of the public. You may wish to carry some information to confirm the activities you are undertaking (e.g. a spare Testing the Water survey leaflet). Be wary of dogs off leads. Disinfect any bites and seek medical attention. If you have any concerns about your personal safety, do not continue with the survey.

Adders

Check the area you are visiting to see whether adders are likely to be present. Take care to look at the ground when kneeling or placing your hands on the ground. Wear stout boots. Take extra care when lifting debris from the ground.

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Waterborne diseases

Working near water is a potential source of disease including leptospirosis or Weil's disease, hepatitis A and tetanus. In all cases the best preventative measures are:

- Be aware of where and how these diseases can be caught and take precautions based on this knowledge.
- Ensure tetanus jabs are up to date.
- Ensure that any cuts on hands are covered with waterproof plasters, and carefully clean and cover any cuts or grazes that occur whilst working in water.
- Wear protective clothing such as gloves (this is strongly recommended if you are under 16, gloves will be provided if you are undertaking the Testing the Water survey as part of a schools group).
- Avoid ingestion of water.
- Ensure that hands are washed after contact with water especially before eating, drinking or smoking.
- If you have entered the water, wash thoroughly and as soon as possible.
- If feeling unwell after taking part in the survey, seek medical attention and notify them of the activities you have undertaken.

Lyme's disease is a bacterial disease transmitted by animal ticks associated with rank vegetation, which can lead to severe symptoms if left untreated. A variety of animals act as hosts for the bacteria, including sheep, deer and pheasants. Make regular checks of skin and hair. Remove ticks from the skin as soon as possible. Wear light-coloured clothing so that ticks are visible, tuck trousers into socks so that ticks cannot attach or climb up the inside of clothing without being seen. <https://www.nhs.uk/conditions/lyme-disease/>

Tetanus is a serious but rare condition caused by bacteria getting into a wound. It may result from the infection of even minor wounds and scratches with *Clostridium tetani*, a common micro-organism in soil. The symptoms include muscle spasm, stiffness and fever, and can be fatal if left untreated. The most effective treatment is to ensure you have been fully vaccinated, but if you are unsure about your vaccination status or concerned about a wound you should contact your GP or visit your nearest minor injuries unit. For more information visit: <https://www.nhs.uk/conditions/tetanus/>

Weil's disease (leptospirosis) is an uncommon bacterial infection spread by animals, but the risk is increased if you regularly come into contact with rivers and lakes. The organism is carried by rats and other animals, and excreted in their urine. Many people only experience mild flu-like symptoms but the condition can be very serious in others and even fatal if left untreated, so if you experience any symptoms check with your GP. You can avoid the risk of Weil's disease by washing your hands thoroughly after taking your water samples and by cleaning and covering wounds before you collect the sample (e.g. by wearing latex free gloves). For more information visit: <https://www.nhs.uk/conditions/leptospirosis/>

By accepting to survey for Testing the Water and Freshwater Habitats Trust it is assumed that this risk assessment has been read, and that you will take all possible care to assess and avoid the hazards listed and perform the survey in a safe manner. If any incidents, accidents or near-accidents occur during the course of your survey, please ensure you contact the project team as soon as possible.

Contact: Anne Carter, FHT Project Officer

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