



How to River Dip

A guide for young people

You will need:

- A fine mesh net, you could attach an old plastic sieve to a sturdy stick
- A bucket, shallow container or washing up bowl, a light colour is best
- A clear container or jam jar
- Identification sheet or field guide
- Bug pot and magnifying glass if you have them
- Wellies or water shoes

Visit <https://www.wessexrt.org.uk/riverwildlifeinvestigators.html> for our 'How to' video on river dipping and more

Safety First!

Wear old clothes and wellies - never go in barefoot, there may be sharp objects on the river bed

Cover all open cuts and scratches with waterproof plasters

Check you have permission to access the river and that the water levels are low - ankle deep is best

Stay out of fast currents

Take a friend and a responsible adult with you

Wash your hands before eating or drinking



- Before you get started, take a moment to look at the surface of the water, are there any insects walking on the surface of the water or flying around?
- Set up the equipment a safe distance from the river edge
- Carefully put a small amount of river water into the bucket, shallow container or washing up bowl
- Take a kick sample from the river:
 - place the net flat on the river bed, making sure the net opening is facing upstream and the water is flowing through the net
 - leave a gap of about a foot's length in front of the net opening, then disturb the gravel or sediment on the river bed with your feet
 - by wiggling your feet around on the river bed, you are disturbing any creatures hiding in amongst the stones and they are carried into the net by the flowing water
 - try not to kick too much sediment or any big stones directly into the net, as these may smother and harm the river life
 - experiment with different locations within the river, try kick sampling by the river bank, in amongst vegetation, in stones and in silt
- Empty the net and its contents into the shallow container by turning it over and gently pushing the net inside out
- Look carefully! Some creatures will be very small - use the jam jar or clear container to gently scoop up creatures for a side on view
- You won't need to re-fresh your water each time you dip, just if you fill your tray with silt or mud
- You may catch small fish whilst kick sampling, these should be placed in a deeper tub rather than a shallow tray - return them straight back to the river once you've had a good look



Bullhead



- Have a go at identifying everything using the identification guide, you could take photos, make notes and draw your favourites
- When you've finished, carefully return everything to the river by gently emptying the shallow container and jam jar, holding them low over the water
- Make sure the equipment is rinsed in the river water so it is clean and creature free
- If you want to dip another stream straight away, make sure you disinfect your net and other equipment - otherwise make sure it's left to dry for 48 hours before it's used again somewhere else, this will help prevent the spread of non-native species and diseases
- Remember to wash your hands before eating or drinking - running water and soap is best



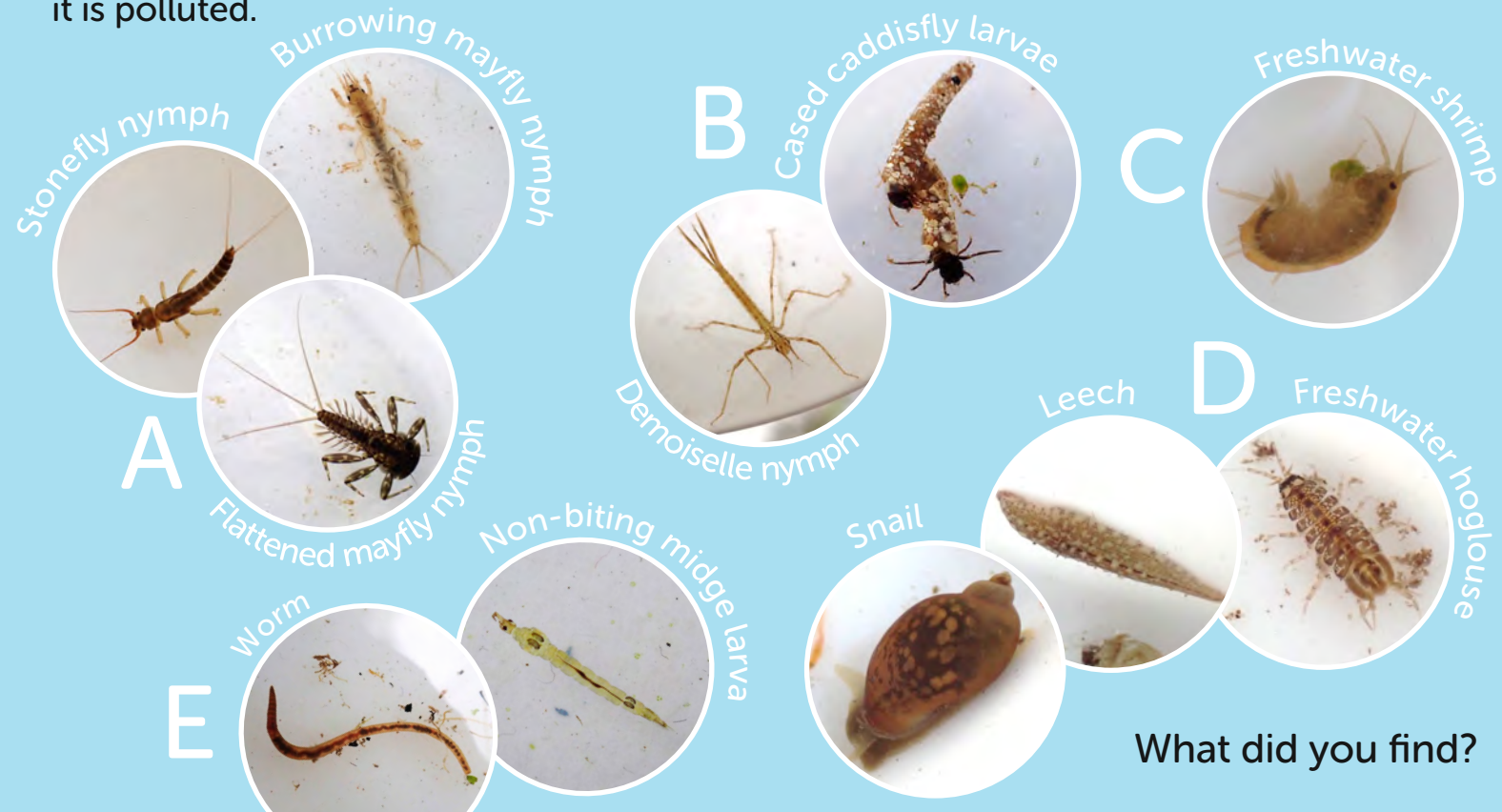
What does our river life tell us?

Finding out what lives below the surface of a river or stream is a great way of learning about its biodiversity (the variety of plant and animal life) and health.

To work out the health of a river or stream, we look for invertebrates. Invertebrates are creatures without a backbone - there are thousands of them living in the river, they have amazing lifecycles and they can tell us a lot about pollution levels.

Pollution is when people make nature dirty. Some invertebrates can live in polluted water and some cannot, so we can tell how dirty or clean a river is by what we find.

For example, mayfly nymphs can only live in clean water so they get a score of A. Lots of A's means that the river is really clean and lots of E's, without any A's or B's suggests it is polluted.



What did you find?



Did you know?

- Female freshwater shrimp carry their young in pouches until they're about a month old - they can produce up to 50 young every four weeks!
- Cased caddisflies make their cases by spinning together material like sand, stones, leaves, twigs and even empty snail shells - they use a silk to glue it all together that is released from glands around their mouth
- There are 51 different species of mayfly in Britain, they can look quite different but their three tails are the key to identifying them - as flies, some species only live for a few hours, during which they have to mate and lay eggs



Handy notes:

- An invertebrate is a creature without a backbone.
- Many invertebrates in the river are the immature stage of another bug, usually a beetle or a type of fly
- Usually, the immature stage lives in the water, and after metamorphosis the adult will live in the air or on land
- A larvae is an immature stage that after metamorphosis looks different as an adult, e.g. a beetle or midge
- A nymph is an immature stage that after metamorphosis looks the same as the adult, but has additional wings, e.g. a mayfly or damselfly