

**Aims:**

To explore the world of a river or pond and discover some of the animals that live in the water.

You will need:

- Long handled nets (one per group)
- White trays or buckets (one per group)
- Small pots/jars (magnifying pots are great but old margarine tubs will do!)
- Plastic teaspoons
- River invertebrate identification guides

Instructions:**River / Pond dipping**

1. Find a safe location alongside the edge of the river or pond where you can reach the net into the water without any danger of falling in.
2. First take a minute to look at the surface of the water – are there any bugs walking on the water or flying around?
3. Fill the white trays with water (best done by an adult) and distribute one tray per group. Try to spread groups out along the river / round the pond to give space.
4. Sweep your net back and forth through the water to try and catch any water bugs. Sweeping through vegetation, bank edges or across stones can often be more successful than 'open water' sweeps
5. Empty the contents of the net into the water filled tray and look what has been caught. Use the teaspoon to catch a beastie and pop it into a sorting pot to have a closer look. Use the magnifiers and identification guides to work out what it is.
6. Group members should take turns using the net and adding into the tray – it doesn't need to be emptied each time, just if it gets full of mud! Try sweeping it in different habitats – in open water, in vegetation or in mud/stones at the bottom.
7. Make a list of what you've found, make drawings or take photos to look at later.

Kick sampling

If you have wellies and access to a stream which is shallow enough to walk in you can try kick sampling.

Place your net into the water, resting on the bottom. Stand upstream of it and disturb the substrate by wiggling your feet around. This dislodges any animals hiding within the stones and they are carried into the net by the flowing water.

Empty your net into the river water filled tray filled and look at what you've caught.

Handy notes:

Most of the invertebrates that you will find in the pond are immature stages of another bug – most often a beetle or a type of fly.

Commonly the immature stage lives in the water and after metamorphosis the adult will live in the air/on land.

A **larvae** is an immature stage that after metamorphosis looks different as an adult. E.g. Beetle or midge.

A **nymph** is an immature stage that after metamorphosis looks the same as the adult, but just has additional wings. E.g. Mayfly or Damselfly.

[Download a freshwater invertebrate ID guide.](#)

[Watch a video](#) of some of the different types of invertebrates you might find in the river.

You may catch a fish whilst sweeping the net. These can be viewed on land but should be placed in a deeper tub rather than the white tray and returned to the water after a few minutes only.

Remember to wash your hands after finishing the activity!

Do more:

Do the OPAL river/pond health survey – more information, survey booklets and further freshwater ID guides available at <https://www.opalexplornature.org/watersurvey>