

## Guide to Pond Dipping

### Background

Forests play a vital role in sustaining water resources and aquatic ecosystems. Forests provide natural filtration and can even help improve stream quality and watershed health by decreasing the level of storm water runoff and pollutants that reach local waters. Trees absorb nutrients and pollutants and transform them into less harmful substances. LEAF Ireland encourages students to examine the relationship between forests and water and to investigate challenges in maximising the wide range of multifunctional benefits of forests without detriment to water resources and ecosystem function.

### Pond Dipping

Surveying the plant and animal diversity within local ponds, pools and lakes can be used to assess the health of the ecosystem. Pond Dipping is an excellent activity for students of all ages and is a great way to introduce them to a wide range of plants, insects and amphibians. It also offers an opportunity to learn about food chains and food webs as well as discovering variations in lifecycles and the effects of pollution on aquatic life.





For school groups, a pond dipping trip will satisfy many of the criteria for learning about the variety and characteristics of living things and the processes of life. It can also be used to provide inspiration for Art, Maths or English projects. Younger students will enjoy drawing or painting pictures of the creatures they find, as well as writing stories about their experiences.

**NOTE! When investigating local water bodies safety should be the priority!** It is important to find an area where students can safely reach into the pond with the net. Avoid areas where there is a risk of falling into deep water. Alternatives are to let the students observe an adult doing the netting or bring a container containing the catch into the classroom.

### Tools needed:

- A net
- A shallow container
- A pond life identification chart
- A child's fishing net or a kitchen sieve tapped to a brush handle will work, but for frequent use it is better to buy a high quality, lightweight net with a removable bag for cleaning, preferably a telescopic version.
- A shallow plastic white or clear container

### Steps:

- Before using the net, you need to half fill your tray or bucket with water from the pond and place it on a table, bench or level ground.
- Then use your net to dip into the pond.
- Sweeping in a figure of eight will ensure that you retain the catch in the net. Areas around the edge of the pond, especially near vegetation, tend to be the most productive.
- Take care not to scoop up mud from the bottom of the pond, as this will clog up your net and make it difficult to see what you have caught.
- Gently turn the contents of your net inside out into the tray.
- Once everything has settled, you should be able to view a fascinating selection of pond-dwelling creatures.
- A pipette or turkey baster can be used to transfer individual specimens to small clear container for a closer look.
- Now you can use your pond life guide to identify the creatures found. If you can't identify some creatures you could take a photo, if you post the photo on the Insects/Invertebrates of Ireland Facebook page, Irish amateur and professional entomologists will help you with your identification.
- When you have finished, make sure to return all water and inhabitants to the pond.
- Trays, pots and nets should be rinsed and dried thoroughly before storage.

**Note!** If you are going to be using nets in different ponds, then sterilising using a broad-spectrum disinfectant will help prevent the spread of disease between water bodies.