

Pond Dipping 101



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Your local pond is the perfect place for young explorers. The combination of water, mud, and interesting creatures can help kids connect to the natural world and pique their curiosity.

Pond Dipping 101

Where and When:

May to September are the best months for pond dipping as this is when most creatures will be active and breeding. Any body of still water is suitable for studying, but make sure that you have permission to access the area. Kids should be able to easily dip nets into the water without falling in. Ponds with a variety of vegetation and open water are likely to support a high diversity of species.

Equipment:

Dipping Net: preferably long-poled with a mesh material (a small aquarium net will do or you can make one using nylons and a coat hanger). Bug nets won't work as the holes are too big.

Tray/container: preferably shallow and white or clear so you can see the creatures you catch.

Foil tart tins, plastic petri dishes, large plastic spoons, ice cube tray and/or turkey basters for looking at individual creatures.

Magnifying glass

Pond guide book

Instructions:

- Fill your tray with pond water and set it on the bank.
- Lie on your front or kneel by the side of the pond – don't lean too far over the edge or there's a chance you'll fall in.
- Move the net slowly through the water so you don't stir up too much mud from the bottom. Dip near vegetation because pond creatures love to swarm around plants. A figure-eight motion helps you catch them as they flee when they feel the water move.
- Pull the net from the water and gently turn it inside out into the tray and let the water settle. If you have excess vegetation, remove it carefully and return it to the water, leaving some for the animals.
- Rest the net in the pond while you investigate, to avoid harming anything that is caught in it.
- Use a stick or one of the items you brought with you and gently spread the plants and slime out around the tray. Small pond creatures hide in the plant material.



What You May See

You may be able to find both macroscopic creatures, ones you can see with your naked eye, and microscopic creatures, ones you can only see with a magnifying glass. Watch the small creatures swim around and observe the variations in the plant matter you picked up. Use a plastic spoon to lift individual specimens out of the tray so you can look at them in an isolated environment. Don't pick them up with your hands – they'll be tiny and fragile and you could accidentally hurt them.

Pond creatures include vertebrates that have bones inside of their bodies like fish, frogs, tadpoles and newts and invertebrates that have no bones inside of their bodies like mosquito larva, leeches, dragonfly nymphs, and diving beetles. Counting the legs of any creatures you find is a way to help you to identify them. For example, leeches and bright red bloodworms don't have any legs. Water beetles, backswimmers, and water striders all have six legs; water spiders and water mites have eight legs, and water lice have 6 pairs of legs.

- On a warmer day, check the water temperature in your container and try not to keep creatures in the tray for more than 10-15 minutes at a time.
- Beware of leaving any predators in the containers for too long, (like diving beetles and their larvae, and dragonfly and damselfly nymphs) or they may eat other creatures. It's often helpful to separate these carnivorous predators out from the rest of your catch.
- Don't forget to look for wildlife around the pond, too. You might see dragonflies whizzing past, hear frogs and toads croaking, or see a family ducks waddling about. If you're lucky, you may even spot a heron swooping down for its fish supper!
- After you've spent some time looking at all the pond-life in your catch, return it all safely back into the water. Stand at the edge where you dipped and lower the tray all the way to the water. Gently pour the contents back into the pond.
- Be sure to clean out any mud or vegetation from the net and tray back into the pond. They may contain small creatures not visible to your eye.
- Wash your equipment and hands carefully afterwards.

Safety

Pond dipping is hugely exciting for children, sparking curiosity and environmental interest, but exploring water does have risks so it's important to be vigilant.

- Make sure you are always supervising your child while pond dipping and choose a shallow pond.
- Ensure children exercise caution around the water and don't lean too far over.
- Never enter the water if you drop something – the pond may be deeper than it looks.
- Pond water contains bacteria, so make sure any cuts are covered by watertight bandages.
- Always wash hands thoroughly after this activity.

Here are some common pond creatures you may find while dipping!

Gather your equipment, read the instructions in the Guide, and get out there.



Backswimmer



Bloodworms



Caddisfly Larva



Damselfly Nymph



Diving Beetle



Dragonfly Nymph

Here are more pond creatures you may find while dipping!

How are you doing so far?



Leech



Mayfly Nymph



Mosquito Larva



Pond Snail



Water Mite



Water Strider

These creatures are very small!

You may need a magnifying glass to see them. Sizes can range between 0.1 - 15 mm.



Amphipod



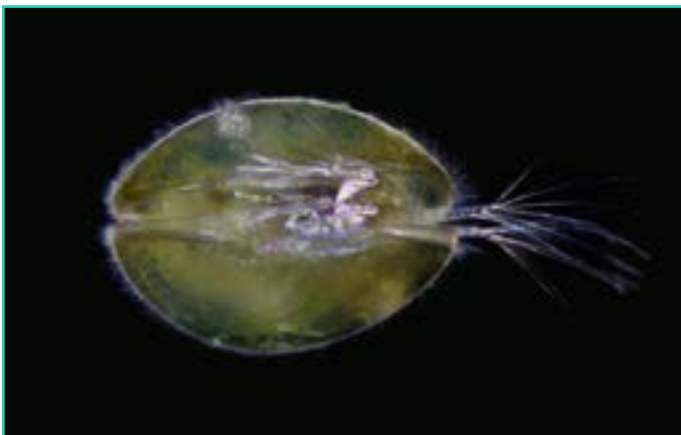
Copepod



Hydra



Planaria



Seed Shrimp



Water Flea

Looking for more wild wetland fun?
Join Scientist Heather as she explores pond dipping!



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