

1. Pond dipping

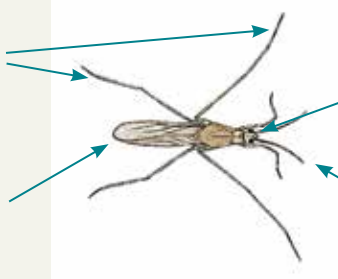
Adaptations

Example:

**Pond
skaters**

Long legs: so it can reach high speeds to chase down its prey

Body is covered in dense hairs to trap air for it to breathe when it goes underwater



Large eyes (with good 3D vision) to help locate and chase its prey

Proboscis (mouth parts) to impale its prey and suck out the contents

➤ My pond invertebrate is called

Space for you to draw your pond invertebrate

1

➤ Where does it live?

➤ How is it adapted to living in the pond?

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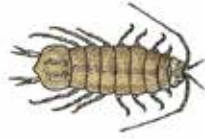


Cased Caddisfly larva



How many did you find?

Freshwater Hoglouse



How many did you find?

Water Scorpion



How many did you find?

Rat-tailed Maggot



How many did you find?

Caseless Caddisfly larva



How many did you find?

Water Boatman



How many did you find?

Pond Skater



How many did you find?

Midge larva



How many did you find?

Alderfly larva



How many did you find?

Water Beetle



How many did you find?

Water Spider



How many did you find?

Leech



How many did you find?

Dragonfly nymph



How many did you find?

Beetle larvae



How many did you find?

Freshwater Shrimp



How many did you find?

Flatworm



How many did you find?

Damselfly nymph



How many did you find?

Mayfly nymph



How many did you find?

Snail



How many did you find?

Other worms



How many did you find?

Pond health score

The invertebrates (animals with no backbone) that live in a pond can tell us a lot about how clean and healthy it is. Some need very clean, food quality water, while others are less fussy and can be found where the water is polluted. Use the table below to work out how healthy your pond is.

1. Look at the invertebrates you found in pond and tick which you found.
2. If you tick a box then write down the score. Some invertebrates have been grouped together, so even if you find several types, or lots of one type, it only gets one score.
3. Work out your pond health score and compare it to the scores below.

Type of pond invertebrate	Score	Tick if you found any	Write the score here
Cased Caddisfly larva	10		
Caseless Caddisfly larva	10		
Alderfly larva	10		
Dragonfly nymph	10		
Damselfly nymph	10		
Water Scorpion, Water Boatman	5		
Mayfly nymph	5		
Water Beetle (adult and larva)	5		
Pond Skates	5		
Water Shrimps	5		
Freshwater Hoglouse	1		
Water Snail	1		
Midge larva, Rat-tailed Maggot, Leech, Flatworm, Worm	1		
Add up the numbers in the last column to find the pond health score		Pond health score is	

- Health score 0-5 The pond is not very healthy and could be improved
- Health score 6-30 The pond is quite healthy
- Health score 31 or more The pond is very healthy. It is a good quality pond.



Pond invertebrate fact file

Many different types of invertebrates (animals with no backbone) live in ponds. Some need very clean, good quality water, while others are less fussy and can be found where the water is polluted. Some feed on detritus (dead plant and animal material), others eat algae and plants, and some are carnivores that eat other small animals.

Caddisfly larva

Cased caddisflies build a case out of sand grains and plant material. They graze on algae. Caseless caddisflies may be carnivores. Often a sign of good quality ponds.

Worm-like animals

Worms and midge larvae feed on detritus. Flatworms, leeches and rat-tailed maggots are carnivores. Can happily live in polluted ponds but will also be found in good quality ones.

Alderfly larva

Carnivores that live in the mud at the bottom of the pond. Only 3 kinds live in Britain. Often a sign of good quality ponds.

Water Snail

Carnivores that live in the mud at the bottom. Graze on algae. Can reach 4 cm long, but others are tiny (just 2-3 mm). Can survive in polluted ponds but also be found in good quality ones.

Water Beetle

Carnivores. Over 300 kinds in Britain. The adult beetles are good fliers and fly between ponds. There should be lots of different kinds in good quality ponds.

Dragonfly nymph

Ferocious carnivores that will eat tadpoles and small fish. Adults can be seen flying around the pond. Indicators of good quality ponds.

Pond Skater

Carnivores that run across the water surface. There are 8 kinds found in Britain. Can live in both good and bad quality ponds.

Damselfly nymph

Carnivores. The adults can be seen flying around the pond. Indicators of good quality ponds.

Freshwater Shrimp

Feed on detritus. They are fast swimmers. Can live in both good and bad quality ponds.

Mayfly nymph

Most graze on algae but some feed on detritus. Some kinds of mayfly can tolerate some pollution so are found in both high quality ponds and ones that are not as good.

Freshwater Hoglouse

Also called Water Slaters. Feed on detritus. Crawl around at the bottom of the pond. Only 2 kinds in Britain. Can tolerate pollution. Can live in bad quality ponds.

Water Scorpion and Water Boatman

Water Scorpions and Water Boatmans are carnivores. All have piercing mouthparts. Found in medium to good quality ponds.

2. Make your own pond

A step by step guide

You will need

- An old washing up bowl/plastic container
- Gravel
- Stones of different sizes and/or a brick
- Rainwater
- Small Pond plants e.g. Miniature waterlily, Starwort

1. Find a suitable place for your pond to go – ideally in the garden, somewhere that gets some sun is best (but not all day!). Make sure you get permission first!
2. You can either dig a hole to sink your container into the ground (so the top is at ground level) or just put it on the ground, and build some steps/slopes up to it with stones or bricks. If you're digging, get some help from a grown up, or better yet get them to do it for you!
3. Put a layer of gravel in the bottom of the container.
4. Add different sized rocks or brick, to give a range of depths and spaces in the pond. You also need a ramp up to the top of the container (on the inside).