



HANDS-ON EXPERIMENTS

INVISIBLE CARNIVORES

Wildlife in an ecosystem can be classed as a carnivore, omnivore or herbivore depending on their eating habits. Carnivores eat other animals, herbivores only eat plants and omnivores eat both. On the Severn, for example, a kingfisher bird is a carnivore – it preys on fish like sticklebacks and minnows and insects like water beetles and dragonflies. However, while kingfishers may be an easy to spot carnivore, freshwater ecosystems like ponds, streams and lakes are also home to another slightly less obvious one – tiny flatworms called planaria. Try catching some for yourself and we can learn about their importance in freshwater ecosystems.



The Experiment

What you'll need: A freshwater source e.g. river, pond, stream; a length of thick thread; small piece of raw liver or ground beef; small jar; magnifying glass.

1

Tie the string around a small piece of meat.

2

Dip bait into the stream

3

Fill the jar with stream water

4

After a few minutes, slowly raise the meat out of the water, and gently lower it into the jar

5

Use a magnifying glass to see if any planaria were caught. If not, try it again, leaving the bait in for a longer time.

Further Investigation

- What role do you think planaria play in freshwater ecosystems? (Clue: what you would do without the dustbin lorries visiting your house every week?)
- Have a close look at your planaria – they have two eyespots that are sensitive to light but cannot form clear images – how do you think they detect their food?
- Try fishing for planaria in different parts of your freshwater source or in more than one source, if you have access to them. Do you catch fewer or more planaria – why might this be?

VIDEOS FOR THIS RESOURCE AT:

INTRODUCTION:



Clickable Link:

<https://youtu.be/1yzUGusS3vo>

CONCLUSION:



Clickable Link:

<https://youtu.be/QMcqbdzv2g>

