

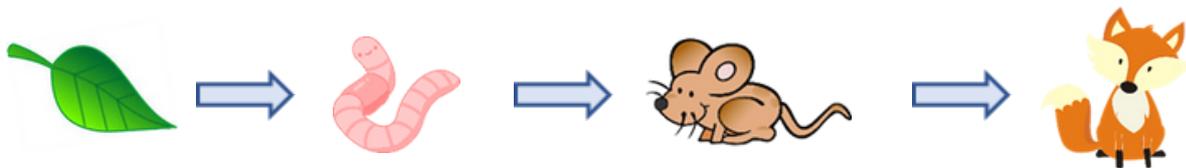
Future of Nature: Create a Food Web

Introduction

Food webs are great ways to visualise how species are connected within a community by showing which species eats which other species.

A **community** is all the species that are in a habitat or environment. There can be many different connections between species in a community, which creates a web.

A **food chain** is one single straight line from the bottom of a food web to the top. There can be many interconnected chains within one web. Arrows show the direction of energy flow, so going from what is eaten towards what has eaten it. For example, a fox eats a wood mouse, which eats a worm, which eats leaf litter.



A food chain always starts at the bottom with a **producer**. This is a species that can create its own energy, like a plant creating energy from sunlight.

Arrows will then point to all the species that eat the producer. These are called **consumers**.

In this activity your participants will work out what the connections are between a selection of species you give them to create their own food web.

Activity Set Up

What you will need:

- Card
- Colouring pencils or printer
- Scissors
- String
- Blue tack

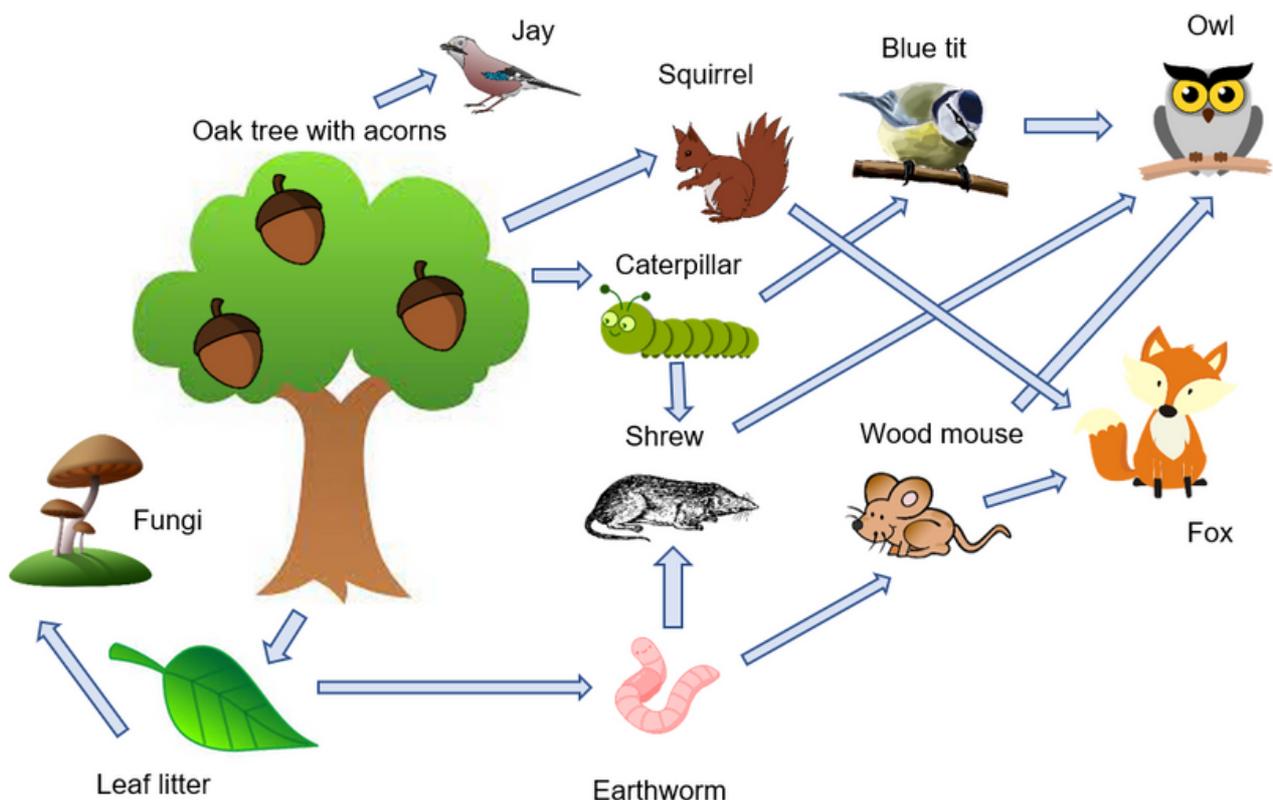
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Before running the activity with your participants, research some food webs and pick one that has some familiar species. Make sure you understand how each species in the web is connected to all the others.

Create a separate picture card for each species. You can draw the animals or find pictures of them on the internet and print them off. Make sure each card is clearly labelled with what the card represents.

Cut some lengths of string and stick arrows at the ends of them.

Here is an example of a food web and species to get you started but you can research and choose any food web you like.



YSLP Week 2022 Activity

Future of Nature: Create a Food Web

Keeping Safe

Before you create and lead your activity, complete the *Staying Safe* section of the Create badge, or the Risk Assessment template, in your Log.

Risks to consider:

- Cuts from scissors
- Paper cuts from card
- Choking hazard of getting tangled in string

Leading the Activity

Give your participants a species card each and some string with arrows on it – they may need to work in small teams if there are more participants than cards. Instead of sticking arrows to the string, you could ask participants to use their fingers to point in the correct direction.

Ask the participants to arrange themselves into a food web. They will need to work out how their species is connected to the other species and which direction the arrow of energy flow is pointing. One species may have more than one piece of string connected to it.

Going Further

- Can your participants work out who is a producer and who is a consumer?
- What happens if one species is removed? How does it affect the other species that are left? For example, if the fox was removed it would not be eating mice and shrews so their numbers would go up but more mice and shrews would mean they would be eating more worms and their numbers would go down. Removing one species can affect many other species.

Twitter Challenge

How many connections did you find between your species?

Tag us in your photos and videos of your fantastic food webs @YoungSTEMLeader #YoungSTEMLeaderWeek

Enter by 8pm for the chance to win a prize for your centre!



www.youngstemleader.scot



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