

Web of life activity



Ages: 9+



Time: 30 minutes

Purpose:

To learn about the wider impacts of biodiversity loss and ecosystem collapse.

Youth work outcomes:

Outcome 4: Young people participate safely and effectively in groups

Outcome 7: Young people broaden their perspectives through new experiences and thinking

Sustainable development goals:



Materials:

Large space and long pieces of string

Context:

Populations of mammals, fish, birds, amphibians and reptiles have declined by an alarming average of [68% since 1970](#). This biodiversity loss is happening at an unprecedented rate, and has been caused by humans destroying habitats such as forests, wetlands and grasslands. Biodiversity is essential to life on Earth, as species and ecosystems are interlinked so the loss of one element will impact many others. Much of this biodiversity loss goes unseen and unnoticed, but it is already having a big impact. For example, the loss of many species of insect pollinators has had an impact on agricultural productivity and food security. Young people can think about how biodiversity loss is affecting their local area with this activity.

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Instructions:

Discuss with the young people the different aspects of the ecosystem in their local area. What animals and birds and plants have they seen where they live? What do they eat? What eats them? Get the young people to choose which part of the ecosystem they want to represent – this may depend on their prior knowledge of local biodiversity but you could suggest things like insects, worms, types of trees, water supply, even minerals in the soil. The more connections the better!

When the young people have decided what they are, ask them to connect themselves to the other parts of the ecosystem that affect them or that they have an effect on (for example by eating or being eaten by them) using the pieces of string. This part may take some extra research from the young people! Every part of the ecosystem should be connected to at least one other part, until a web forms between the different young people.

Now, discuss with the young people the effects that climate change and biodiversity loss is having on local ecosystems. Which parts of the ecosystem are particularly threatened? What knock-on effects will there be if these elements are wiped out? Ask the young people who are representing the most vulnerable parts of the ecosystem to drop their pieces of string to demonstrate what would happen if one link is compromised. Young people connected to a dropped piece of string should also drop their strings. This is a good way of demonstrating how interconnected ecosystems are and how quickly natural systems can fall apart.

Discussion questions:

- Did you know how interconnected our natural systems are before?
- Which aspects of the ecosystem had the biggest knock-on effects on other aspects?
- What can we do to protect and nurture these essential parts of our ecosystems?

Glossary:

- **Biodiversity loss** = The loss of the plant and animal species that make up our ecosystems.
- **Ecosystem** = a natural environment where plants, animals and other organisms interact with landscape and weather systems.
- **Habitat** = the place that an animal or plant lives and thrives, eg. a forest or a wetland.
- **Agricultural productivity** = the efficiency of our farming and food production system.
- **Food security** = a measure of the availability of food and the ability of people to access it.