



Habitat fragmentation game

Age: 7-14

Topic: Biology

Time: 30 minutes



What should learners already know?

- A habitat is the environment an organism lives in.

What equipment will I need?

- A4 paper
- Cardboard tokens/pasta
- Biodegradable cup

How will learners explore this?

1. Children pair up, holding a piece of A4 paper flat between them. Children form lines of up to 5 pairs (you can form multiple lines if class is large).
2. Place a biodegradable cup at one end of the line, and a practitioner stands at the other end of the line. These represent two large, green wildflower meadows, and each piece of paper represents hedgerows linking them. Each token represents a pollinator looking for nectar.
3. Now, place 3 tokens (or pieces of pasta) onto the first sheet of A4 paper, and get the children to pass the pasta down the line between their pieces of paper. When the tokens are at the end, place them into the biodegradable cup.
4. Once the tokens have reached the end, get each pair to fold their pieces of paper in half, mimicking habitat degradation. Each pair should hold their now smaller piece of paper in the same way they were holding it before, in the same line.
5. The practitioner places three more pieces of pasta on the first sheet in the line, and re-run the game.
6. Keep re-running the game, folding the paper in half each time, until the children can no longer get any pasta into the cup at the end. This is the problem of habitat fragmentation.

How can we show the learning?

- Discuss with children why the paper becoming smaller made the game more difficult? It was harder to support all the tokens on small pieces of paper!
- What does this show us about habitats becoming fragmented? Pollinators cannot travel long distances if they do not have suitable habitats in between to support them.
- Challenge children by asking them to describe what might cause habitats to become fragmented.
- There are many different ways that habitat fragmentation can come about; creating buildings, roads, farm land on what was previously wild green space.
- Extension: Ask the children whether they think this problem is unique to pollinators.
- Habitat fragmentation affects many species of animals and plants all over the world.



Did you know:

One solution to habitat fragmentation is to create green stepping stones or corridors which link habitats.



Did you know:

Farming is the largest cause of habitat fragmentation around the world.

