

8. The perfect mixture

A delicious downland cake

Activity description:

Ask the children to imagine their favourite cake! If they could choose whatever they want, what would it be? Lemon drizzle, victoria sponge or a rich chocolate cake? Ask them whether they think their favourite cake would be as tasty if some of the ingredients were missing? Would the cake taste the same if the bakery measured the ingredients incorrectly?

Tell the children that the role of looking after (managing) the habitats of the North Downs is a bit like the role of a baker. For the baker to make the most delicious cake he or she must follow the recipe to make sure the mixture is just right. Downland habitat management is a bit like making a cake, it's very important to get the right mixture to get the richest variety of plants and animals. If the cake isn't delicious, you probably won't eat it all. If the Downland doesn't provide all the right ingredients (conditions) for the animals and plants to live (food, light, shelter, water) they won't survive or thrive.

Chalk grassland (or chalk downland) is one of the most special wildlife habitats in the UK. On a visit to Kent in 1994 Professor David Bellamy said that: "Chalk grassland is the European equivalent to tropical rain forest." If a well looked after chalk grassland was a cake it would be full of the richest most delicious ingredients such as wildflowers, grasses, butterflies, bees and orchids. It would look and smell amazing!

Mix up the downland management cards and hand them to each group (ideally 4- 6 children per group). Explain to the children that sometimes environments change and that this can pose dangers to living things. For example, it is estimated that we've lost 80% of our chalk grassland over the last 60 years. Challenge the children to work together to identify the positive and negative downland management cards. Can they place all the threats to downland habitats and wildlife into the 'Disastrous downland cake' mixing bowl?

Once they have identified some of the threats, explain that the 'Old Chalk New Downs project' was given Heritage Lottery funding in 2017 to work with local people to improve, restore and reconnect threatened chalk grassland habitats. Now challenge the children to identify the positive impacts of good habitat management and place these in the 'Delicious downland cake' mixing bowl.



Curriculum links:

KS1 Science

Living things and their habitats –

Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.

Identify and name a variety of living plants and animals in their habitats, including microhabitats.

KS2 Science

Working scientifically –

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.

Living things and their habitats –

Identify and name a variety of living things in their local and wider environment.

Recognise that environments can change and that this can sometimes pose dangers to living things.

KS1 English

Spoken language, reading, writing, spelling and vocabulary.

Extension activities:

Encourage the children to think of other positive human impacts that can be added to the 'Delicious downland cake' mixing bowl. For example, Kent County Council's Country Parks and Countryside Management Partnerships have regular volunteer groups which help manage the downland landscape. Can the children find out what other local wildlife organisations are doing to help?

Ask the children to discuss how they think climate change may affect downland habitats? Can they list some negative and/or positive impacts?

Points to discuss could include:

- Chalk grasslands susceptibility to drought and increased winter rainfall, leading to changes in wildlife, erosion of soils, and increased fire risk.
- Possible increases in pests and disease in woodlands and vulnerability to drought.
- The flow of chalk rivers and streams may change as they become more vulnerable to drought. If rivers dry out this may lead to erosion of the banks and an increase in sedimentation. Changes in river flow may cause the build-up of pollution, reductions in freshwater habitats and impact on the effectiveness of flood storage services.

Visit: www.naturalengland.org.uk for more information.

Encourage the children to create an information guide on the role of a chalk downs champion or a hedgerow hero. How are these volunteer roles helping protect the North Downs?

