



How can Stemville improve its biodiversity?

How can Stemville improve its biodiversity?

Date, name, job role



Which type of grass is better?

Vote – but be prepared to justify your choice



1. Astroturf



2. grass kept
neat and tidy



3. grass left to
grow wild



What is biodiversity?

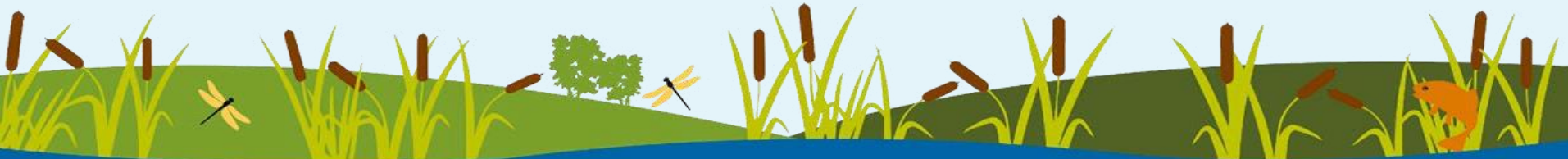


1 minute to think
1 minute to pair
1 minute to share



What is biodiversity?

Biodiversity is the number and variety of different species of organisms on Earth or within an ecosystem.



Why is biodiversity important?



1 minute to think

1 minute to pair

1 minute to share



Why is biodiversity important?

High biodiversity improves the air we breathe and the variety of food we can eat. It helps to tackle climate change and its effect.

Different species in an ecosystem are interdependent. This means they depend on each other for things like food and shelter.

In an area of high biodiversity one species is less likely to depend on only one species as a source of food or shelter. Therefore, if one species dies out, the rest are more likely to survive as they have a variety of options. This makes an ecosystem stable so it is better for us and our environment.



Who can help improve biodiversity?

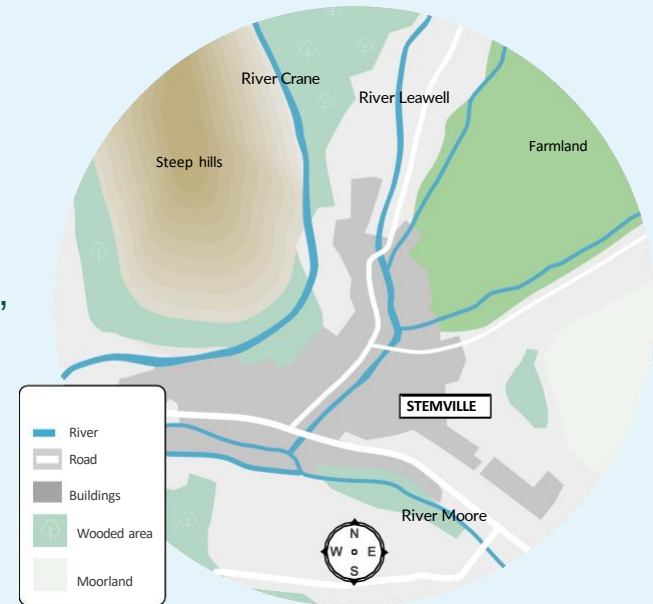
Please watch the video:

How the Environment Agency can tackle climate change



Where is Stemville?

- Stemville is a town in the North of England with a population of 15,000 people.
- It sits on 3 rivers: River Moore, River Crane, River Leawell.
- Most of the town is surrounded by land used for farming cattle, but to the west of the town are steep hills.



Stemville's biodiversity

Over the centuries Stemville has grown from a few houses and farms to a large town.

This is because lots of factories were built which provided employment, so the population grew. These people needed houses so more farmland has been used for housing and roads have been built.

Trees in local woods have been cut down to create more farmland.

The biodiversity in Stemville has decreased.



Can you help Stemville?

The council need to improve the biodiversity in the town, and they have called in your team of ecologists to help.

First step:

Find out about the various methods to increase biodiversity from the information cards

Next steps:

- Decide which methods you will use to help Stemville
- You must choose a package of methods which you can afford within a £1.5 million budget to be spent over a 5 year period
- Create a short pitch to the council, explaining which methods you have chosen and why



Biodiversity improvement score

The biodiversity improvement score is an indication out of 10 as to how well the method improves biodiversity. The higher the score the better the method is at improving biodiversity.



What is in a pitch?

You will be graded on the following things, so consider them in your planning:

- Numeracy skills – Ensure your costing is correct and within the £1.5 million budget over 5 years
- Use a good range of biodiversity improvement methods
- Justify your choices of biodiversity improvement methods
- Communication skills - Explain your plan clearly
- Answer follow up questions confidently



Let's hear your pitch!

**Tell us which
methods you
have chosen**

**Tell us the
total cost
of your
plan**

**Tell us why
you have
chosen these
methods**



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What factors and actions affect biodiversity?

(extension task)

Look at the information of the biodiversity information improvement cards.

- What factors and actions affect levels of biodiversity?
- Explain why these factors affect biodiversity.
- Can you think of any other factors which affect biodiversity not mentioned on the cards?
- Which biodiversity improvement method could be beneficial where you live?



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