

Dune Stabilisation

You have been given dune stabilisation as your method of coastal protection. Your job is to record how dune stabilisation works and make a note of its advantages and disadvantages. You then need to prepare a short presentation that will inform the rest of the class how dune stabilisation works and give information about its strengths and weaknesses. Be as creative as you can during your presentation.

How does dune stabilisation work?

What are the strengths of dune stabilisation?

What are the weaknesses of dune stabilisation?

Draw a labelled diagram to show how dune stabilisation works.



Dune Stabilisation

Sand dunes can play a key role in protecting the coastline as they stabilise large amounts of sand and stop it from being transported away. This means the energy of the waves causes less damage to the coastline.

The process starts by planting marram grass, which grows effectively in sand dunes and helps to stabilise the sand. Once the marram grass is established, other plants will also grow in the stable sand dunes.

To make sure that the marram grass grows, large areas of the sand dune can be fenced off to make sure nobody tramples over it. This gives the marram grass the best chance to grow, which is important because the planting process is time consuming.

Stabilising sand dunes gives the coast added protection but it also looks entirely natural, so it is a sustainable solution. Some people, however, may not be too keen on the areas being fenced off at first.

As well as looking natural, this is also an option that could provide a boost for local wildlife by giving them a new habitat to thrive in.

This is a very cheap method of coastal protection. It could cost as little as £500 to stabilise the dunes over a 100 metre stretch of coastline.

