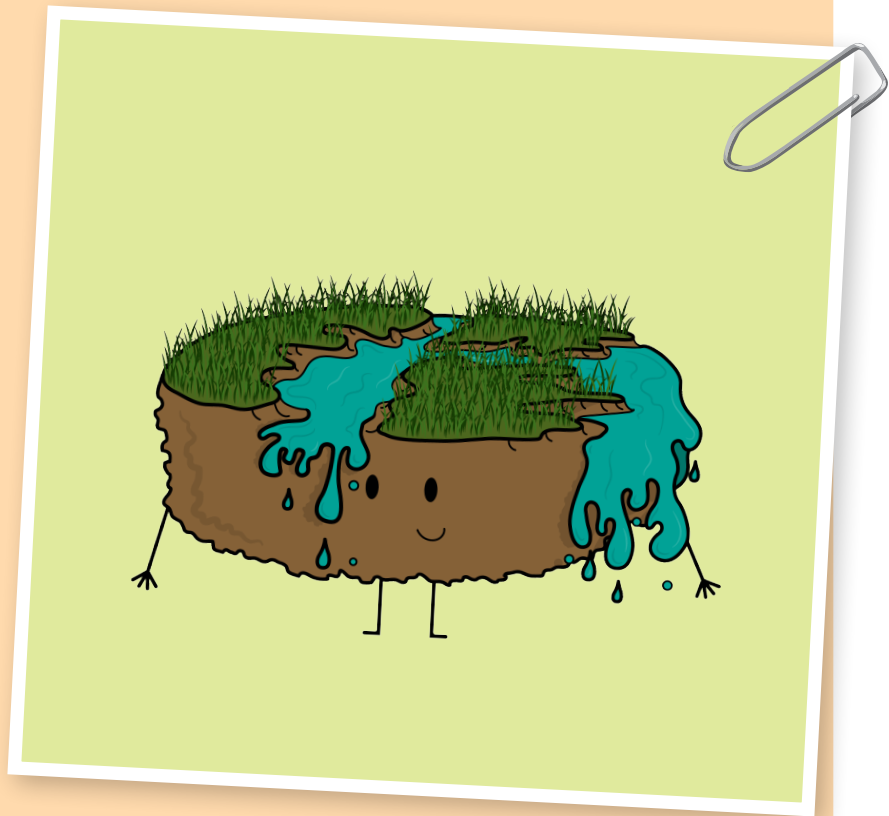




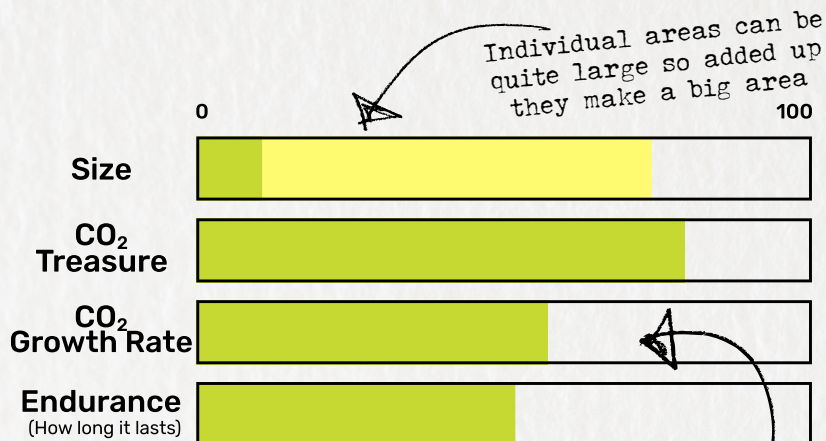
**TOP SECRET**



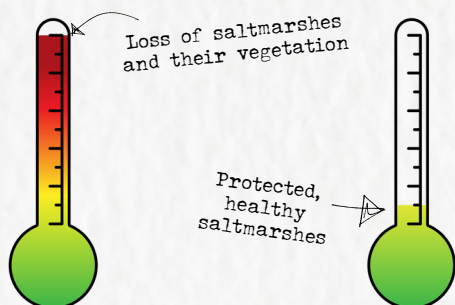
# HERO PROFILE



## POWER FEATURES.



## CLIMATE CHANGE INDICATOR.



## HISTORY.

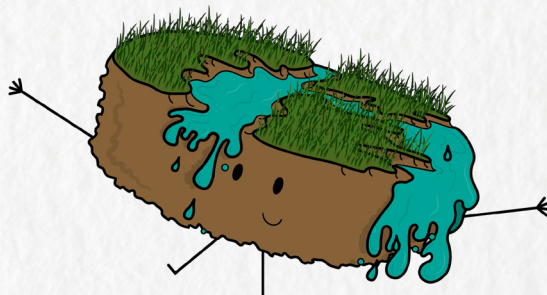
Working at the point where land and sea meet, this super wet hero has taken years to grow, facing many challenges to lead a team of heroes in a difficult place to work. Fighting hard to support the other heroes in their protection role.

## THREATS/VULNERABILITIES.

- Pollution (coming from the land and the sea)
- Building (developments at the coast)
- Removal (being dried out for growing crops)

## TEAM MEMBERS.

- Mudflats
- Reeds
- Seabed





They are found where land is flooded by the tide twice a day, usually at the estuary of a river.

They have deep mud which is created by a build up of dead plant materials and the sediment carried by the river.

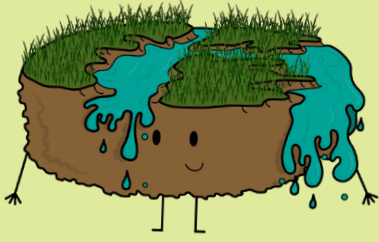
Saltmarshes are found all along the coast of the UK.

They are really important habitats for wading birds, many travelling a long way to feed at them.



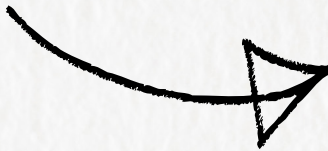
# REEDBEDS

Saltmarsh team member



© AMY LEWIS

Reedbeds can be found around the UK (seen here in dark grey)



They are made up mostly of one species of reed which grows in the slightly salty water and deep mud in rivers.

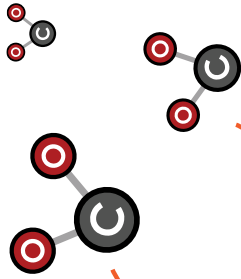
They are home to some great birds like reed warblers, reed buntings and this bearded reedling (also known as the bearded tit)



© ANDREW PARKINSON/2020VISION

# How do saltmarsh and reedbeds help take carbon from the atmosphere?

Rivers carry lots of tiny parts of rock and soil that have been eroded from the land. These include carbon from living things

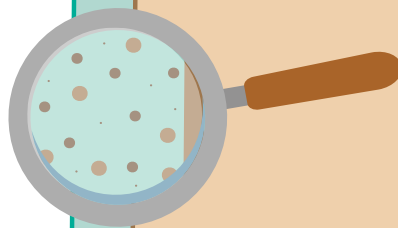


Reeds and saltmarsh plants take in carbon dioxide in photosynthesis

Those tiny parts get trapped by plants in the water.

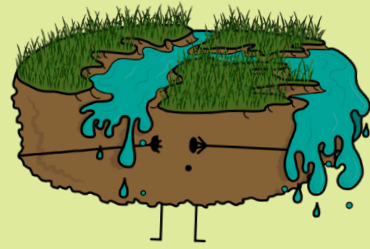
Roots and plants help to store some carbon in the soil

When the plants die, they rot into the soil taking the carbon with them



## MUDFLATS

Saltmarsh team member



© PETER CAIRNS/2020VISION

Mudflats are covered at high tide and uncovered at low tide.

They are found on 1130 estuaries in the UK.

They can also be found on a further 1160 large bays and inlets along the coast!



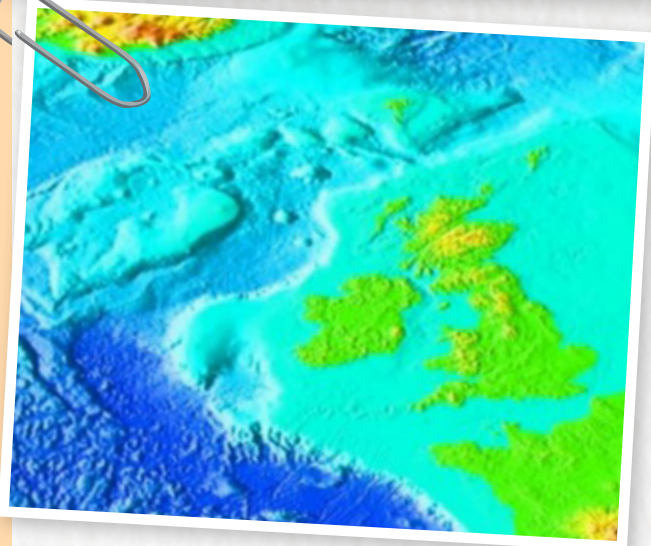
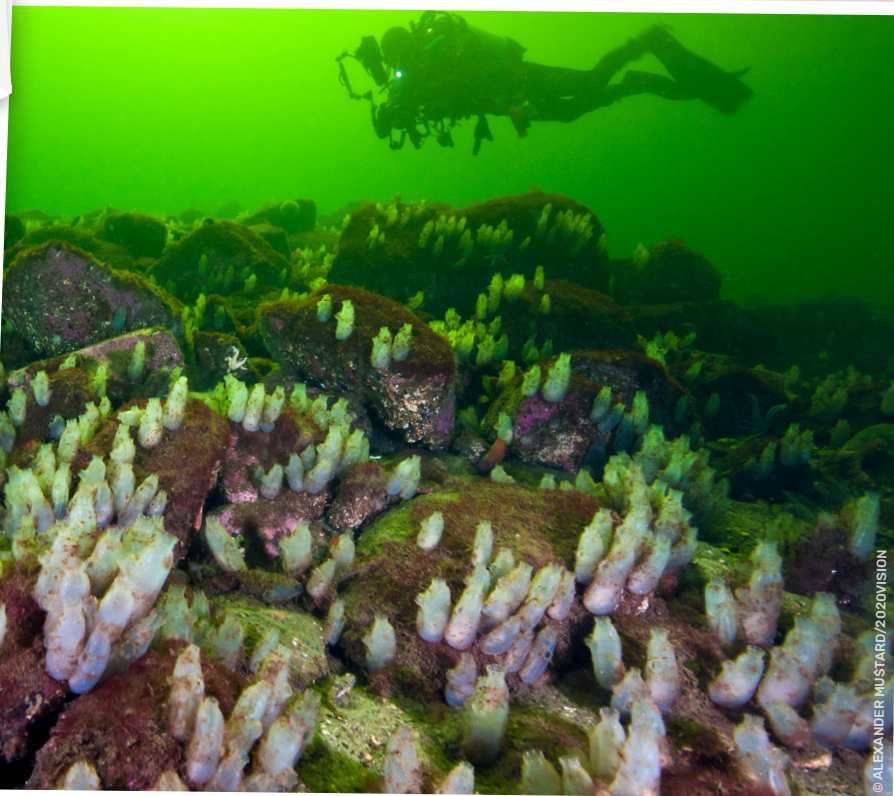
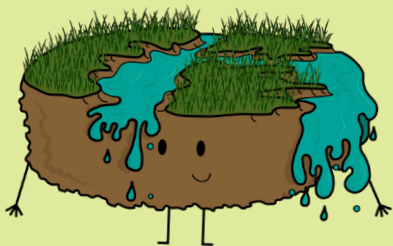
© TOBY FOX/2020VISION

The mud is full of life like these cockles. This makes them very important habitats for birds.

They are made of very deep mud — they can be very dangerous to humans!



SEABED  
Saltmarsh team member



Around the UK, there are some shallow seas before it gets really deep in the Atlantic ocean.

There are lots of different habitats on the seabed around the UK.

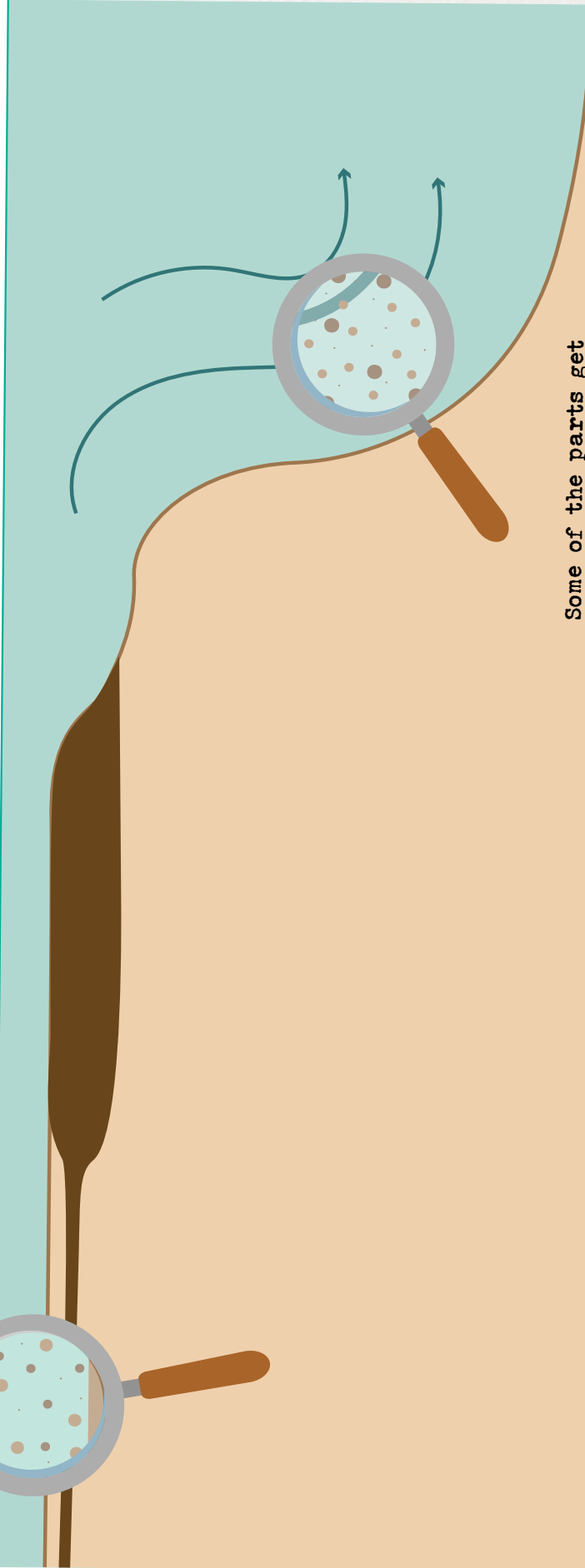
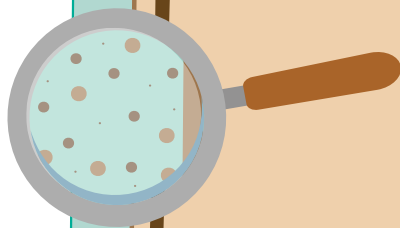
Anything that dies in the ocean may fall to the ocean floor in what scientists call "marine snow".



# How do mudflats and the seabed help take carbon from the atmosphere?

Rivers carry lots of tiny parts of rock and soil that have been eroded from the land. These include carbon from living things

Where the river slows down in the estuary, lots of the parts are dropped creating mud flats



Some of the parts get carried by the current out to sea where they come to rest on the seabed



PLASTIC POLLUTION



SOIL EROSION



SEWAGE

# THREATS

BUILDING AT THE COAST

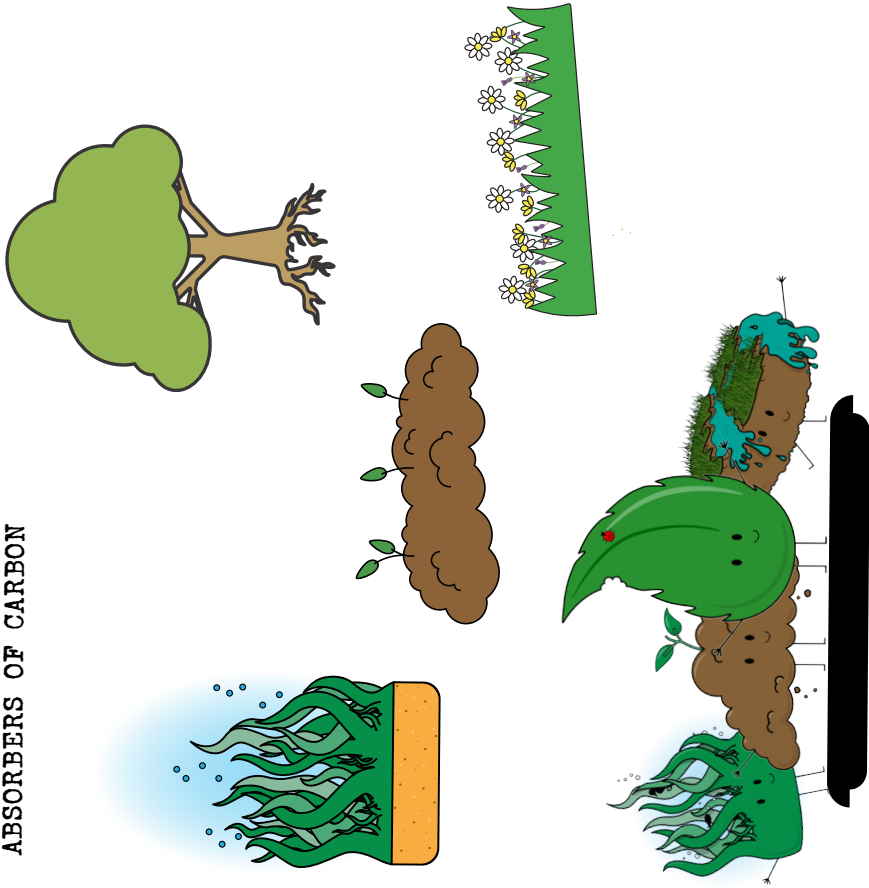


LAND POLLUTION



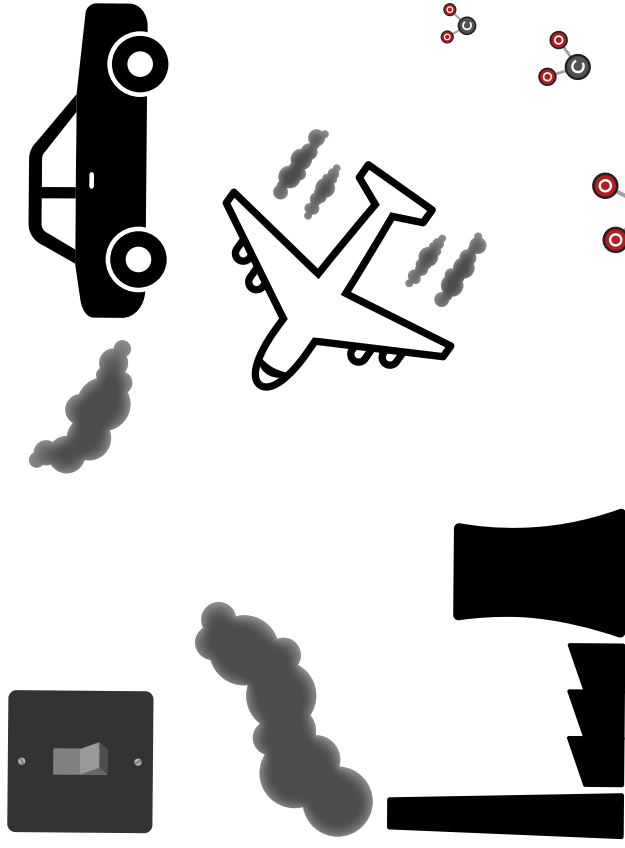
POLLUTION AT SEA

## ABSORBERS OF CARBON

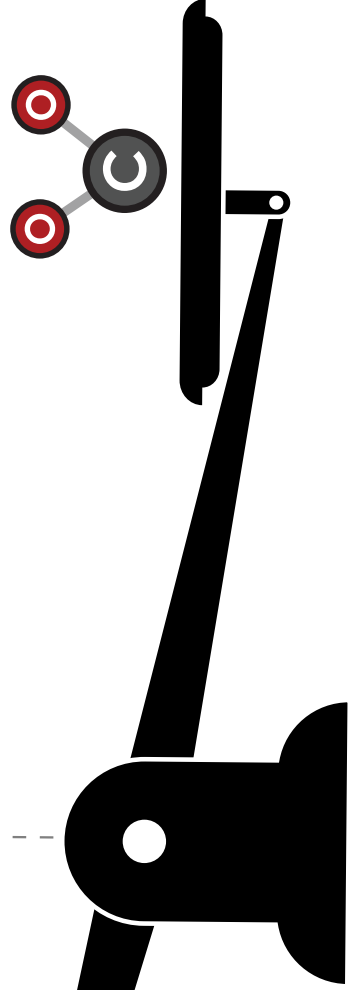


Another way to bring balance is to increase the number and strength of heroes to absorb carbon so **MORE** is taken out of the atmosphere.

## PRODUCERS OF CARBON



One way to bring balance is to **REDUCE** the amount of carbon emissions we are producing so **LESS** is being released into the atmosphere.



How can I help?  
Who can I influence?



Some ideas to investigate:

How? Assembly? Noticeboard? Webpage? Letters? Newspapers?  
Videos? Posters? Leaflets? Support Campaigns?

## Other sources of information

© CHRIS GOMERSALL/2020VISION



### Habitats

[kids.kiddle.co/Salt\\_marsh](https://kids.kiddle.co/Salt_marsh)

[wildlifetrusts.org/habitats/wetlands/reedbed](https://wildlifetrusts.org/habitats/wetlands/reedbed)

[rspb.org.uk/fun-and-learning/for-kids/facts-about-nature/facts-about-habitats/estuaries-and-mudflats/](https://rspb.org.uk/fun-and-learning/for-kids/facts-about-nature/facts-about-habitats/estuaries-and-mudflats/)

© JULIE HATCHER



### Water Pollution

[kids.niehs.nih.gov/topics/pollution/water/river-stream/index.htm](https://kids.niehs.nih.gov/topics/pollution/water/river-stream/index.htm)

© TOM HIBBERT



### Plastics

[plasticfreeschools.org.uk/](https://plasticfreeschools.org.uk/)

[lessplastic.org.uk/9-ways-to-reduce-plastic-in-your-school/](https://lessplastic.org.uk/9-ways-to-reduce-plastic-in-your-school/)