



Seagrass, the wonder plant

Restoring our oceans





UK waters are home to an
amazing plant

What is seagrass?






Coastal seas

The coastal seas are made up of many different ecosystems.



The background is a vibrant underwater scene of a seagrass meadow. Three circular callouts are overlaid on the image. The top-left callout shows a seahorse camouflaged among the seagrass. The bottom-left callout shows a dense school of small, yellow and green striped fish. The right callout shows a larger, yellowish fish with a prominent dorsal fin grazing on the seagrass.

Seagrass is an important nursery habitat for young fish and invertebrates

..and endangered species such as seahorses.

A nursery

for wildlife





Who am I?

Food and habitat

for wildlife





It creates clearer water

It removes pollution from water at the coast



It provides us with oxygen to breath

It protects the coastline

Other benefits of seagrass



Seagrass captures carbon up to **35**
times faster than tropical rainforests

It absorbs **10%** of the ocean's carbon each year.

An area of seagrass the size of a football pitch can support
over **50,000** fish and over **700,000** invertebrates.

In the UK, up to **92%** of our seagrass has
disappeared in the last century.

Seagrass in numbers



Pollution

Run off from the land can be harmful to marine plants and animals

Destruction

Anchors, boat propellers and bad fishing practises all have an impact

Coastal towns and tourism

Unsustainable development at coasts and mass tourism can be a problem for seagrass

What's the problem?





One million seeds
have been collected by volunteers.

Seagrass Ocean Rescue





WWF needs you

Do you want to be involved in a real world conservation project in your school?

- The prepped seeds will be placed in **20,000** tiny hessian bags before they are planted in South Wales
- The work that needs to go into getting everything ready for planting is **huge**, so we are hoping that you'll be able to lend a helping hand.

If you'd like to help us with the next stage of this fantastic project, please email us at schools@wwf.org.uk to find out more.



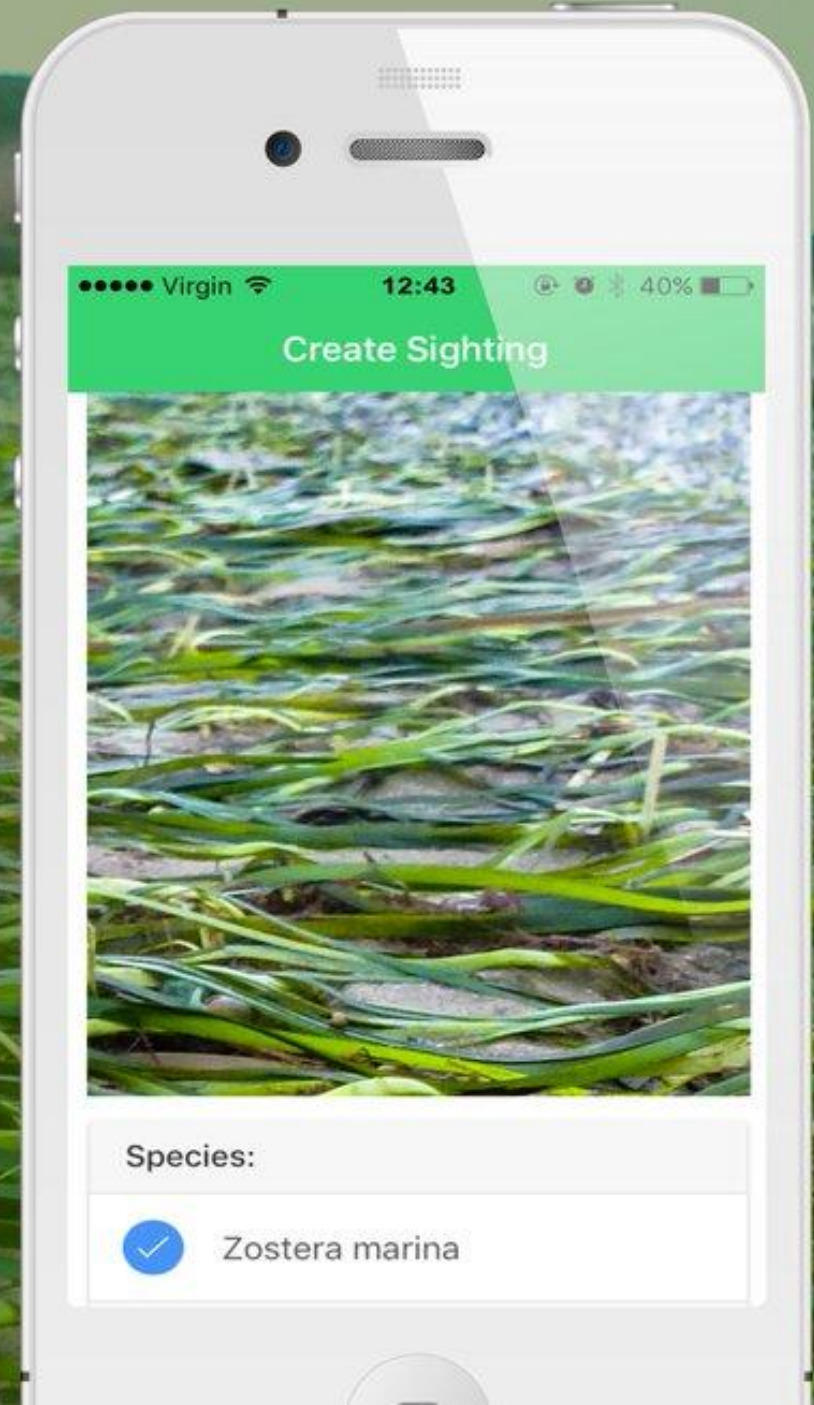


Seagrass Spotter

Seagrass Spotter is a conservation and education tool for tracking seagrass meadows around the globe.

Help us conserve our coastlines by uploading your own seagrass sightings

You can also get involved in real world conservation through Seagrass Spotter. Go to www.seagrassspotter.org to find out more.

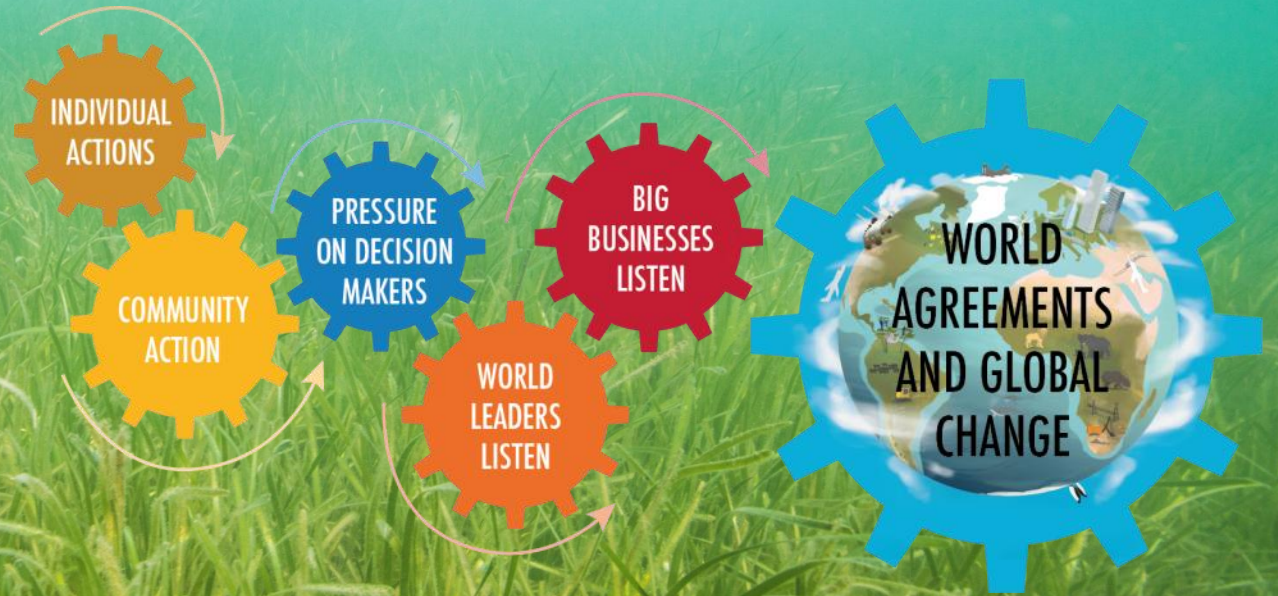


Big businesses

- Just like WWF Sky think it is really important to protect our planet
- They think everyone should do their part, including big businesses

Individual actions

What do you think you can do?



We can all do our bit



OUR PLANET EDUCATION RESOURCE

Let's protect
our coastal seas





Funded by



Working together to safeguard
Marine Protected Areas

In partnership with



schools@wwf.org.uk

#Seagrassoceanrescue

www.wwf.org.uk

SEAGRASS, THE WONDER PLANT

Classroom Presentation: Slide notes for teachers

Slide One: Seagrass, the wonder plant

Find out about WWF's Seagrass Project.

Covering about 70% of the earth's surface, our oceans supply half the oxygen we breathe and provide food and livelihoods for more than a billion people. They are also home to a wondrous array of wild species, from tiny plankton to huge whales.

Copyright credits: Seahorse © naturepl.com / Alex Mustard / WWF

Slide Two: What is seagrass?

Seagrass is a wonder-plant that lives in shallow, sheltered areas along our coast. It is vital to the health of our seas and can help address environmental problems.

Video: <https://www.youtube.com/watch?v=saVjUKW45T4>

Copyright Credit: © Lewis Jefferies / WWF-UK

Slide Three: Coastal seas

Here sunlight reaches the sea floor, so plants can grow.

Although they make up only 10 per cent of the ocean, these shallow waters of coastal seas (within 230 km of land) are home to 90 per cent of all marine species.

The coastal seas are made up of many different ecosystems including coral reefs and mangrove forests. Closer to home, you may have seen saltmarshes, kelp and fields of underwater sea grasses.

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- *Main picture © Lewis Jefferies / WWF-UK*
- *Kelp © Fritz Pölking / WWF*
- *Saltmarsh © Global Warming Images / WWF*
- *Seagrass © Lauren Simmonds / WWF-UK*

Slide Four: A nursery

Seagrass is vital for marine life, they form an important nursery habitat for several species of juvenile fishes and invertebrates including endangered wildlife such as seahorses.

These then move to other habitats as they mature. These include many of the fish we eat, including cod, plaice and pollock and snappers and emperors in tropical waters.

Copyright Credit:

- *Seahorse © naturepl.com / Alex Mustard / WWF*
- *Fish (Bigeye Snappers) © Jürgen Freund / WWF*
- *Seagrass and fish © Anthony B. Rath / WWF*

Slide Five: Food and habitat

Seagrass meadows are an important feeding ground for herbivorous grazers, like green turtles seen here and manatees, and for foraging omnivores that may feed on invertebrates and other animals that live amongst the plants.

Several species of coral reef fishes forage in seagrass meadows during the night and return to the protection of the reefs during the day.

It provides a home for this rather unusual species which is seen here grazing on seagrass. Can you guess what it is?

- An elephant seal
- A beluga whale
- **A dugong**

Copyright:

- *Turtle* © Jürgen Freund / WWF
- *Dugong* © Jürgen Freund / WWF

Slide Six: Other benefits of seagrass

From the film we watched earlier, can you remember any of the other benefits of seagrass?

- It creates clearer water
- It removes pollution from water at the coast
- It protects the coastline
- It provides us with oxygen to breath

Copyright Credit:

- *Clear water* © WWF-Malaysia / Mazidi Abd Ghani
- *Coastline* © Lewis Jefferies / WWF-UK

Slide Seven: Seagrass in numbers

Our climate is warming up and we know why. We release carbon dioxide into the atmosphere by burning fossil fuels for energy, farming, and destroying forests. These carbon emissions are causing the greenhouse effect, trapping heat and making the Earth warmer, faster than could happen naturally.

Seagrass captures carbon up to 35 times faster than tropical rainforests and, even though it only covers 0.2% of the seafloor, it absorbs 10% of the ocean's carbon each year, making it an incredible tool in the fight against climate change.

Copyright Credit: © Lewis Jefferies / WWF-UK

Slide Eight: What's the problem?

Why have we lost up to 92% of our seagrass in the last century?

Pollution Run off from the land can be harmful to marine plants and animals

Destruction Anchors, boat propellers and bad fishing practises all have an impact

Coastal towns and tourism

Warming global temperatures make the seas more acidic, harming habitats on which many animals depend for food and shelter

Copyright Credit: © Lewis Jefferies / WWF-UK

Slide Nine: Seagrass Ocean Rescue

We're working with **Sky Ocean Rescue** and **Swansea University** to bring these incredible underwater meadows back to life, by launching the biggest seagrass restoration project ever undertaken in the UK.

One million seagrass seeds have been collected this summer from various sites around the country by a team of volunteers.

Copyright Credit: © Greg Armfield

Slide Ten: WWF needs you

Your school has the opportunity to take part in real world conservation.

- The prepped seeds will be placed in 20,000 tiny hessian bags before they are planted in north Wales
- The work that needs to go into getting everything ready for planting is huge, so we are hoping that you'll be able to lend a helping hand.

If you'd like to help us with the next stage of this fantastic project, please email us at schools@wwf.org.uk to find out more.

Copyright Credit: © Greg Armfield

Slide Eleven: Seagrass spotter

- Use the Seagrass spotter tool to upload your own seagrass sightings.

Slide Twelve: We can all do our bit

We can all play a role in creating a more sustainable future through our own actions.

Big businesses

- Just like WWF Sky think it is really important to protect our planet
- They think everyone should do their part, including big businesses
- That's why they are supporting WWF with donations so that we can carry out this important work

Individual actions

- Individuals can get involved with www.SeagrassSpotter.org and help us by recording sightings of seagrass!
- By not flushing nasties down the toilet and drain we can all do our bit to help with water quality

- Don't use pesticides, herbicides and chemical fertilizer as these can end up in our water system
- People on boats need to make sure they tie up to moorings and don't drop an anchor on the precious seagrass.

Global change

- If projects like this happened globally, it would be amazing for our planet
- We're calling on our government to help the UK lead the way.

Copyright Credit: © Lauren Simmonds / WWF-UK

Slide Thirteen: Let's protect

Let's protect our coastal seas and the wildlife that lives there.

Watch the video: <https://www.ourplanet.com/en/video/biome-tour-of-our-coastal-seas>