TEACHER'S PACK

Seagrass Scar Solutions

Equipment required

- Print out of the 'Seagrass Scars Solution' worksheet, one per group (3 pages)
- Internet enabled devices and internet access

To complete the activity

- 1. Share the 'Project Seagrass' video with the learners www.tiramor.cymru/seagrass (Resource 2).
- 2. Distribute the 'Seagrass Scars Solution' worksheet one per group, and provide learners with internet-enabled devices with internet access.
- 3. Ask learners to imagine they are marine conservation engineers designing solutions to protect seagrass meadows, just like the replanting efforts shown in the video. Explain their goal is to design a creative solution to protect or restore these vital habitats and to prevent scars caused by stressors like boats, vehicles, pollution, or algae overgrowth. Can they help prevent damage to seagrass meadows and ensure they thrive for the marine life that depends on them?
- 4. Have each group choose a stressor to focus on, such as boat moorings, vehicles in intertidal zones, algae overgrowth from pollution, or sediment disturbance caused by construction or turbulence.
- 5. Provide an opportunity for learners to research real-life strategies, such as Advanced Mooring Systems, seagrass restoration, education campaigns, or pollution reduction.
- 6. Ask groups to design a solution for their chosen stressor. They can create a labelled diagram, a 3D model using recycled materials, or a poster/infographic showcasing the stressor, its impact, and their solution.
- 7. Provide an opportunity for the groups to present their projects to the class, role-playing as conservation scientists. They should explain their chosen stressor, their solution, and the benefits of their idea for seagrass ecosystems.
- 8. Ask learners to reflect on their work by considering what inspired their solution, how it helps seagrass and marine life, and what else people can do to protect seagrass ecosystems. Learners may wish to complete the checklist provided to evaluate their work. Discuss how learners could improve or what you would do differently next time.

Seagrass Scar Solutions Challenge Card

Mission: You are marine conservation engineers!

Seagrass meadows are being damaged by human activities, leaving scars caused by boats, vehicles, pollution, and algae overgrowth.

Your challenge is to work together to design a creative solution to protect seagrass meadows, prevent these scars, and help them recover.

1. Choose your stressor

As a group, pick one stressor to focus on:



Boat moorings

Chains and anchors dragging across the seabed.



Vehicles

Cars or quad bikes driving through intertidal seagrass beds.



Algae overgrowth

Pollution causing thick algae to block sunlight.



Sediment disturbance

Construction or turbulence burying seagrass or blocking light.

2. Research solutions

Work together to explore real-life strategies to inspire your solution. Ideas might include:

Advanced Mooring Systems

Special moorings that don't drag on the seabed.

Seagrass restoration

Replanting seagrass in damaged areas.

Education campaigns

Teaching people to protect seagrass.

Pollution reduction

Stopping nutrient runoff to improve water quality.

Divide research tasks between your group members to gather information quickly.

3. Design your group solution

Combine your ideas to create one group solution.

Choose how to present it:

Create a diagram

Show how your solution works and label its parts.

Build a model

Use recycled materials to create a 3D version of your solution.

Create a poster or infographic

Explain the stressor, its impact, and your solution visually.

Ensure every team member contributes to the final design!

4. Present your solution

Work together to prepare a short group presentation. Explain:

- 1. What stressor you focused on.
- and how it works.
- 2. Your group's solution 3. Why your solution will help protect seagrass meadows.

Role-play as conservation scientists to make your presentation fun and engaging!

5. Reflect

After your presentation, discuss as a group:

What inspired your solution?

How does it help protect seagrass ecosystems?

What other ideas could people use to protect seagrass?

Seagrass Solution Presentation Self-assessment Checklist

Content We clearly explained the stressor we focused on. We described our solution and how it works. We explained why our solution will help protect seagrass meadows. Visuals We used a diagram, model, or poster to support our explanation. Our visuals were clear and easy for the audience to understand. We labelled important parts of our visuals. Delivery Everyone in the group participated in the presentation. We spoke clearly and at a good pace so everyone could hear and follow. We stayed on topic and kept the audience engaged. Engagement We answered questions from the audience confidently. We encouraged the audience to think about ways to protect seagrass.