

A day in the life...

Marine biologist **Evie Furness** works for Project Seagrass, a charity dedicated to conserving and restoring our precious underwater meadows

INTERVIEW **CAROLINE ROBERTS**

🕒 6am

I grab breakfast and pull on some thermals under my drysuit, ready for a day on the dive boat. The water is 15° and if you're in there for an hour, it gets quite cold. I live in Cardiff, but this week I'm at a seagrass meadow at Porthdinllaen on the Llŷn Peninsula in northwest Wales, where we're harvesting seeds for research and planting.

Seagrass is a flowering plant that lives in shallow, sheltered areas around our coasts and it's one of the unsung heroes of our oceans. It produces oxygen and absorbs greenhouse gases, helping to stabilise the climate. Meadows on the seabed also provide a key nursery habitat for around a fifth of the fish species we eat, and have 20 times more biodiversity than bare sand. Sadly, we've lost 92% of our seagrass meadows over the past century. Water pollution from things like toilet cleaner and washing liquid is a big factor, and run-off from intensive farming causes huge mats of algae and seaweed, depriving the seagrass of the light it needs for photosynthesis. Dredgers and anchors damage it too.

🕒 7.30am

It's a short drive to the beach, where our boat is waiting for us. On board, there's the skipper, a dive supervisor and six divers. We spend the first hour making sure that all our kit is in working order and we're safe to get in the water.

I learnt to dive on a gap year after school, when I visited the Great Barrier



Seagrass is vital to the health of our oceans

Reef. I'd been lucky enough to go there 10 years earlier and had such vivid memories of the vibrant colours of the marine life and corals. But when I returned, I was shocked at the change. Those same reefs were empty of life and the colour had

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gone. It was then that I decided to study marine biology at Swansea University. During my degree, I did a year in industry and worked with Project Seagrass just as the restoration work was starting up. Now I'm the charity's education officer as well as a research technician.

🕒 8.30am

Time to get in the water. I've been on dives where I can't see my hand in front of my face, but today there's great

Lewis Jefferies and WWF



Evie takes a break before the next dive



Surveying the sites



Checking on the seagrass meadows

visibility. Seagrass is an amazing filter, so it's constantly working to remove bacteria, viruses and particles that have been washed off the land, as well as trapping microplastics.

A seagrass meadow is stunning, and diving has to be one of the best parts of my job. It's a biodiversity hotspot, so you see so many species, such as cuttlefish, different types of crab, and pipefish, which are similar to seahorses. We also come across seals, and sometimes even dolphins. They're so curious and want to come up and say hello. I've dived with sharks before, but dolphins are scarier as they're just pure muscle and can get too playful. It's amazing but my heart is in my mouth!

We spend the first dive surveying the health of the meadow and recording our findings on dive slates, which are like underwater clipboards. It's good to see the seagrass is doing really well. We've been collecting seeds from here for the past two years, so knowing it's not being degraded is really important.

🕒 10.30am

Back in the boat for a break. Someone produces a packet of biscuits and a

thermos of coffee and we warm up a bit. There's no toilet so the only option is a very inelegant crouch off the back of the boat! Then we change our air cylinders and check our equipment ready for our next dive.

🕒 12 noon

On our second dive, we're collecting seeds. Seagrass Ocean Rescue is our restoration project in Dale, west Wales, where we've planted two hectares, and we're planning more projects around the UK and internationally.

We also have a variety of research projects going on, such as looking at the genetic make-up of the seagrass, trials on the best way to store the seeds and plant them, and how it uses nutrients. As you're processing the seeds, you have to let all the plant material rot down and it produces a horrible sulphur smell like rotten eggs. I once saw a seagrass-scented candle in a shop and thought: I really don't think you'd want that in your house!

🕒 1.30pm

Coming up from the second dive, you're hoping someone's remembered to bring

a box of sandwiches, plus some cereal bars and a bit of fruit. After lunch, we're dropped on land with all the kit, and the skipper moors the boat, then has a nice cold swim to shore. Back at the accommodation, we wash all our kit down, shower and have a cup of tea.

🕒 3pm

Time to write up all the data we've collected, and to catch up with colleagues who are working on land with some volunteers and a group of schoolchildren. Parts of the meadow are accessible at low tide so they've been collecting seeds, bagging them up and replanting them the next day as part of a trial to see if we can replant immediately. Over 2,000 volunteers, ranging from three-year-olds to those in their 90s, have been involved in the Seagrass Ocean Rescue project.

In normal times, I go into schools to raise awareness of seagrass and its importance. I've run workshops on biodiversity and habitats, had kids prepping the small hessian bags for seed collecting, and played lots of seagrass-related games. Covid has put a stop to this, although we've done some online sessions.

It's given me some time to focus on my master's degree, which is looking at the effect of sea cucumbers on seagrass across the Indo-Pacific region. Like seagrass, sea cucumbers are big cleaners of the ocean, but there's a huge market for them so they're declining at an insane rate.

🕒 6pm

Collapse for a bit. We do a big group meal and tonight someone's made a delicious vegetable curry. We also have a couple of drinks and some social time.

🕒 9.30pm

We're all exhausted so we're off to bed early as we have to do it all over again tomorrow. You get the best sleep when you're working on the boat – I'm out like a light as soon as my head hits the pillow. It's so satisfying knowing that the work I'm doing is helping to slow the effects of climate change, and to save our seas and the amazing life forms in them.

Find out more at www.projectseagrass.org