Sailing the Seagrass Meadows of Ibiza and Formentera

Posidonia seagrass meadows surround Ibiza and Formentera and give the sea a spectacular turquoise colour. The aquatic plant supports incredible biodiversity and is under threat from pollution and bad sailing practices.

Posidonia Seagrass Meadows under Threat in Ibiza and Formentera

The twin islands are two perfect jewels set in the centre of the Mediterranean sea with clear blue waters and dazzling white beaches. Ibiza is crowned with an emerald forested coastline while smaller Formentera has a flat terrain, rising steeply to the south. At <u>Cap de Barbaria</u>, the terrain becomes a staggering headland, towering high above the azure ocean.

Long green seagrass meadows bridge the islands of Ibiza and Formentera and have been flourishing underwater for 100 thousand years.

Over-construction on the shoreline, pollution, climate change, oil drilling, pipeline laying, and the dropping of anchors has challenged the Posidonia ecosystem.

Ibiza and Formentera are popular islands to cruise by sailboat. Hundreds of private, charter and super yachts visit during summer, anchoring in the

numerous protected coves. The congestion causes seagrass damage and increased pollution - and can get to the point where finding a spot to drop anchor is nigh on impossible.

Fellow yachties might not be too thrilled that you're mooring close to them because maneuvering is tight in Ibiza's *calas*. Accidents often happen and anchor chains I frequently drag over loose sandy bottoms, moving boats to new and insecure positions. Remember, everyone will be watching you park - with a kind of morbid delight and fascination:)

Sailing Rules for Seagrass Meadows!

It is highly prohibited to drop anything heavy on Posidonia because it is protected in Ibiza and Formentera. It's also important to watch out that your anchor chain doesn't drag along the Posidonia beds. Furthermore, the bottom is often very rocky and I've seen many yachts lose anchors from hooking on the rocks, especially at *Cala Benirras*.

A tricky place to anchor is the rocky isle of *Tagomago* in the South of Ibiza. Recently, I had a sailboat inspector observe me struggling to anchor in between dense patches of seagrass and rocks. Finally, I managed to land on a patch of sand, to our shared relief.

So, be aware that inspectors regularly come round on dinghies to check out your anchor with their equipment. You'll face an enormous fine if you are caught attached to a grassy underwater bed or polluting the sea.

The first rule of sailing in Ibiza is: Stay away from seagrass meadows! The second rule is just as simple: Don't pollute the water. Pumping out your bilges or getting rid of any hydrocarbons, oils, or paints into the water will also land you a hefty fine. I use Ecoworks Marine eco-friendly cleaning

products on my boat because they're free of harsh chemicals and phosphates.

Where is Posidonia found in Ibiza and Formentera?

A wide seagrass meadow stretches for 8 kilometres from the southern tip of Ibiza at Ses Salinas Beach to Es Freus in Formentera and has been declared a UNESCO World Heritage site. Ses Salinas is also a marine reserve, as is Es Freus. However, smaller seagrass meadows grow in all the bays and beaches of Ibiza and Formentera and you'll need to be on a constant lookout when you're planning to anchor.

4 Amazing Facts about Seagrass Meadows

Despite the rules and regulations to protect seagrass, very few people know much about this special plant and the amazing things it's responsible for. Let's dive deeper into some interesting facts about Posidonia.

1. The Ancient Animal that Filters Sea Water: Bryozoa

Posidonia plays an important part in maintaining the seawater's crystal clarity because of its special relationship with an intricate micro-animal that filters seawater named bryozoa.

'Bryozoa' refers to a genus - and there are a huge variety of different species. *'Electra Posidonia'* is the bryozoa that most commonly inhabits seagrass meadows. (Click here to see a photo of this filamentous creature).

The name *bryozoa* means 'moss animal in Greek, and is similar to coral; a set of clones linked together on a base substrate to form one ancient animal which has lived for over 500 000 years.

Mediterranean bryozoa live and grow their networks on the surface of the long flat green leaves of seagrass. They can either look like white lace or like pale round gelatinous blobs. These exotic creatures feed on the waters surrounding them by capturing tiny sea particles and filtering them through their sponge-like exoskeletons.

Ultimately, this prehistoric system keeps the waters of Ibiza and Formentera clean and pristine. It can hunt effectively because each clone has a teeny brain to strategise. Importantly, this unusual animal can reproduce either asexually or sexually. The twin results are:

- 1. Seagrass is technically immortal because it is always giving off asexual little clones. It may theoretically never die unless there is some sort of massive catastrophe that wipes out a species or a genus.
- 2. Sexual reproduction means that it is also incredibly diverse and adaptable. This is the reason there are so many types of Bryozoa but not all of them will live on seagrass.

The exclusive partnership between the Posidonia and the bryozoa is the very crux that maintains this delicately beautiful ecosystem. It's a symbiotic relationship had been going on for hundreds of thousands of years.

2. Seagrass Meadows create Beaches

Seagrass also plays a major role in the formation of beaches. Without this submarine plant, beautiful sandy beaches would simply not exist in Ibiza and Formentera. There are two ways in which this happens:

- 1. Posidonia forms light egg-shaped bundles of grass fibres, called 'berms' which escape from the meadows and wash up against the shore. These fibrous clusters help to form beaches by shoring up the sand. In areas where the seagrass has been destroyed, we observe beaches eroding fairly rapidly.
- 2. When sand drifts down to the ocean bottom, it falls between the thick clusters of seagrass and gradually accumulates, causing sandbanks. They protect the beaches from waves during storms and permit diverse marine life to thrive and grow in the grassy ecosystem, sheltered from waves and currents.

Today, Ibiza and Formentera are facing rapid beach erosion thanks to heavy shoreline construction and the loss of seagrass. Construction along the shoreline cuts off the sand supply to the sea, and when sandbanks can't form, waves destroy the seagrass meadows. Construction on the coast usually eliminates sand dunes as well, which act to keep the beach shored up.

3. Seagrass Meadows support Biodiversity

Seagrass meadows provide essential nutrients that sustain life in other parts of the sea. The meadows are like underwater farms, offering food and shelter that sustains an astounding variety of marine life. Over 400

plant species and over 1000 animal species dwell here; such as seahorses, crustaceans, turtles, jellyfish, octopi, and nudibranchs.

Seahorses in Ibiza and Formentera are particularly endangered and on the Red List of Threatened Species of the IUCN and the Balearic Government's *Llista Vermella dels Peixos de les Balears*.

4. Seagrass Meadows Prevent Climate Change

Posidonia acts as a sink, absorbing tons of excess carbon from the atmosphere while at the same time oxygenating seawater to support marine life. Rising planetary temperatures have triggered the decline of seagrass meadows, destroying the very antidote to escalating global warming.

Formentera's Save the Posidonia Project

Formentera has launched a campaign called <u>Save the Posidonia</u> and many businesses, hotels, and private individuals have contributed and continue to do so - although they are often the cause of the damage.

The Posidonia Project <u>lists the causes of damage</u> to seagrass:

- Anchor and chain damage
- Sewerage from land
- Wastewater from boats
- Dredging in harbours, ports, piers, and jetties

- Presence of invasive species
- Bad fishing practices
- Climate change

Happiness is ... Sustainable Sailing!

Together we can make a difference. If we wish to keep sailing in the pristine blue waters of Ibiza and Formentera we need to play our part in preserving marine life.

I hope to create more awareness in the community about the preciousness of this important ecosystem through writing this blog. Please feel free to leave your positive comments below - and any suggestions that may help others to leave no footprint. Happy sailing guys.

