

The Formentera offices of tourism and environment report that the Mediterranean Institute for Advanced Studies (Imedea) took to the Internet yesterday to share conclusions from its study of the impact of drainage pipes, moorage and other human activity during the Anthropocene on meadows of posidonia seagrass. "Antroposi" won €83,821.54 in 2017 after it was named one of the winners of the inaugural edition of the Consell de Formentera-backed Save Posidonia Project.

Consell de Formentera premiere and tourism chief Alejandra Ferrer praised Imedea, the Formentera offices of tourism and environment and all those who participated in SPP by adopting square metres of seagrass meadows. "SPP came about as a way to use marketing around Formentera's environmental engagement to get businesses and regular people involved in protecting our natural surroundings", said Ferrer, "islanders and tourists alike had to be familiarised with the issue to understand why protecting posidonia and our local habitat mattered". She insisted real progress would take a great deal of inter-agency coordination, but said safeguarding the seagrass was "a quality of life issue, and ultimately, an economic one too".

For his part, Antonio J Sanz applauded the efforts of Imedea researchers: "They are helping us understand the science behind what's happening to our posidonia meadows, and insight they share will be invaluable as our local government —the closest to ground-zero on this issue— works to protect this element of our natural heritage."

Imedea researcher Iris Hendricks presented conclusions from over a year's worth of research that focused on various swaths of nearby seafloor in seeking to understand how humans affect the seagrass when they release sewage into the water or anchor on or navigate above posidonia meadows.

Effect of sewage pipes on *Posidonia oceanica*

Researchers compared seagrass near a sewage pipe, where levels of inorganic nutrients are high, with seagrass located at some distance (the control) and determined after one year of monitoring that the former exhibited 24% less growth. Rates of nitrogen and carbon particle sedimentation were also greater nearer to the pipes — 6.2 and 9.5 times higher, respectively.

The researchers concluded that the source of nitrogen was indeed the pipes, and that nearby seagrass was storing the nitrogen in its tissue.

The researchers were also able to determine that ambient light and thus photosynthesis rates were similar near and far from the effluent pipes, concluding that sewage in the water did not impede photosynthesis by blocking light.

As for large watercraft like ferries, researchers determined that their passage was to blame for increased levels of turbulence and sedimentation in meadows near Es Freus.

€112,000 for next SPP winners

The most recent edition SPP has been allocated €112,000, funding which is currently in the final stages of approval. Eleven proposals were received, and the expected winner would look at the impact of “emergent pollutants” on Formentera’s posidonia meadows. “Since SPP launched 252,000 square metres of seagrass have been adopted”, said the environment chief, who asserted that with 76.5 million square metres of posidonia in adjacent seabed, “there’s still plenty left that can be adopted”.

President Ferrer insisted in her closing remarks that “right now Formentera has an opportunity. We all saw the recovery of the surrounding natural ecosystem during the absence of human activity during lockdown. We need to attack our problems at their root rather than focusing on the downstream effects, and studies like this one will help us make real progress.”

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