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Seagrass Podcast and Scientist Interview

Posidonia oceanica

Transcript

Ari: From the Encyclopedia of Life, this is One Species at a Time. I'm Ari Daniel Shapiro.

This story begins with a man who devoted himself to an ecosystem and an organism. And it ends with his death – a loss that came all too early, when he was only 37 years old.

His name was Alex Lorente, and we met back in the summer of 2011, in L'Estartit – a picture-postcard Spanish town up the coast from Barcelona.

Lorente was onboard a small boat with a couple of his colleagues from Submón, a marine conservation group. They headed towards one of the scrubby Medes Islands in the Mediterranean. The boat stopped just offshore. Lorente peered over the side.

Lorente: Today the visibility is very good – from the boat we can see the bottom. And now we take a look underwater.

Ari: One of Lorente's colleagues – marine biologist Jordi Sanchez – put on his mask and dunked his head underwater.

When he surfaced, he was beaming.

Sanchez: Lo que ves sería como volar por encima de un bosque – es un bosque en miniatura.

Ari: Sanchez said snorkeling here is like flying over a miniature forest. That's because waving in the water beneath him was a field of *Posidonia oceanica* – a kind of seagrass that grows to a height of about 3 feet. And it's just teeming with life.

Sanchez: Peces pequeños...

Ari: Little fish...

Sanchez: Squid, octopus, urchin, sea star.

Ari: Sanchez said all these species thrive in this thicket of seagrass, which also protects shorelines from erosion, and stores carbon. It makes *Posidonia* a key part of the coastal ecology.

But it's not faring so well. It's slowly disappearing – here and elsewhere. There are a lot of reasons for that decline: warmer water temperatures, coastal development, and pollution. But in a place like this, just anchoring a boat can be a problem.

Anchors and their chains tear up the sea floor and destroy the *Posidonia*. Each anchor leaves behind a barren, sandy path through the grassy forests. Multiply that by thousands of anchors a year, and you get some idea of the threat.

That's why Alex Lorente and his colleagues took action. The Medes Islands are a protected area. Boats that want to fish or even just moor here now have to follow special rules.

Lorente: Pues, mira, ahora mismo tenemos un anclaje en las manos...

Ari: Lorente held up a special kind of anchor he and his team designed. It screws into the ocean floor, and stays put. Then a buoy gets attached to it. To stop here, a vessel has to tie up to one of the buoys. And if there aren't any available, you just have to come back later.

Lorente: We can see the benefits of this kind of protection of the *Posidonia*. Entonces se requieren de muchos años para ver realmente...

Ari: He said it takes years to see results, but the loss of the seagrass has slowed down. Onboard this boat, a year before his death, Lorente was excited about the results of this project.

Lorente: Y sobre todo, no solo la Posidonia...

Ari: He said, it's not just the *Posidonia* that's recovering, but much of the ecosystem too – including a handful of invertebrate species.

Lorente and his colleagues also partnered with local fishermen. The buoys were a tough sell until Lorente reframed seagrass protection as a shared goal – saving an ecosystem that the fishermen's livelihoods depend on.

Lorente: I tell to the fishermen: "I would like to hear that you fish a lot because it means that there is a lot of fish in the sea."

Ari: Lorente told me on this trip that it's just as important for him to listen... and to learn from the fishermen who spend their days in intimate touch with the very seascape his organization's trying to protect. Fishermen like Miquel Sacanell.

Sacanell: Yo creo que una persona clave en el proceso fue Àlex – Àlex Lorente.

Ari: He says that a key person who built the necessary trust between scientists and fishermen was Alex Lorente. In fact, it was Lorente who put me in touch with Sacanell, and Sacanell who told me – in the late summer of 2012 – that Lorente had passed away.

Lorente was out one evening near the Medes Islands with a group, free-diving – which means no air tanks or scuba gear. On his last surfacing...he fainted and sank back into the water. A search team was dispatched immediately but they couldn't find him. And when the current got too strong later that night, they had to evacuate the water. The next day, they found Lorente's body – only 50 yards from the spot where he'd disappeared.

Fisherman Miquel Sacanell.

Sacanell: El carácter que tenía Àlex...

Ari: He says that Lorente's character – his ability to relate to people of all walks of life – isn't something he learned. It's something that was just part of him.

Sacanell says one of his favorite memories of Lorente was watching his face light up when something succeeded – whether it was restoring a patch of underwater habitat, or reconciling the differences between two groups of people.

And, as one obituary pointed out, Alex Lorente died in the very spot he lived to protect. In the very waters that remain home to the *Posidonia* that attracts all the people and animals he cherished.

Ari: Come visit eol.org to see some photos of Alex Lorente and the *Posidonia*. And to view a Google Earth tour that shows an ecological face-off in the Mediterranean between the *Posidonia* and an invasive algae from halfway around the world.

Our series, One Species at a Time, is produced by Atlantic Public Media in Woods Hole, Massachusetts. I'm Ari Daniel Shapiro.

Meet the Scientist

Meet Dr. Jordi Sanchez, one of the scientist featured in the Seagrass podcast:



Where do you work?

I work at the projects' department in SUBMON (Environmental marine services) in Barcelona (Spain).

What do you study?

I design and direct research and conservation projects related to the monitoring of marine habitats and species.

What are three titles you would give yourself?

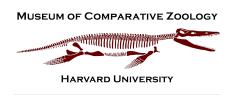
Marine biologist, nature photographer, fossil hunter.

What do you like to do when you are not working?

I like to photograph anything interesting that comes in my way, I read about new technologies and sometimes I play the guitar.

What do you like most about science?

The opportunity to learn about new research techniques in order to apply them to future projects related to marine biology.



The One Species at a Time podcast series is supported by the Harvard Museum of Comparative Zoology.