SAYA DE MALHA DAILY

A Newsletter by Dominique and François



N°8, 8th November 2022

Where are we?

North of Saya de Malha Bank, on the Plateau, above the seagrass meadows 9.50° South 60.51° East Sunny, Light Seas, Wind 16.5 Knots Air Temperature 26°7, Water Temperature 26°7



The Seagrass Meadows

Seagrasses are marine angiosperms or flowering plants found across the globe. They are the basis of the most productive ecosystems. Dependent on light for photosynthesis, they are found in shallow waters between 10 and 20 m. They can however be found down to 70m depth. Seagrasses are important nurseries for numerous species, they stabilise sediments in their root systems, and are an important carbon sink. The Saya de Malha seagrass beds are some of the largest in the world. They include several species, with *Thalassodendron Ciliatum* (meaning "marine tree") being the most dominant. Its elongated leaves swing back and forth with the current's movement reminding of a wheat field in the wind. Those important seagrass beds are vulnerable to trawling.



What's on ?





The ROV

A survey of the seagrasses was conducted using Marine Solutions ROV (Remotely Operating Vehicle). The ROV is equipped with cameras and is piloted from the control room on the ship. It provides real time footage of the seabed surveyed. Images so far show uniform seagrass beds of good quality, some possibly degraded areas, as well as sandy habitats and small coral formations with associated small fish species. At depth of 20 m, the ROV also provides information for navigating the ship.

SAYA DE MALHA DAILY

A Newsletter by Dominique and François



N°8, 8th November 2022

The Portrait



Philippe Bouchet, Professor Emeritus, Muséum national d'histoire naturelle

Philippe was born in 1953 in Brittany. As child he spent a lot of time on the coast fishing for shellfish and learning about the marine world, which led him to his vocation to become a marine biologist. At 20 years old, he was recruited at the Museum of Natural History where he worked until his recent retirement. Beginning with New Caledonia, and thanks to his entrepreneurial spirit, he organised and led international expeditions, financed by philanthropic foundations, to document marine biodiversity around the globe. "Documenting the benthic biodiversity of Saya de Malha is a long-held dream. What we find most surprising are the small size of organisms collected and the limited primary production which so far cannot be explained. Although not yet all described, we expect to find high levels of endemism."

The Catch of the Day

An Unexpected lobster

This *Acanthacaris* of 35 cm was found in a sandy habitat. A sedentary animal buried in the sand, it catches its prey with its long claws. This specimen was collected during a night trawl at 1600 m depth.



Did you know?

Lamellaria

Unlike the whelks or winkles, some gastropods, as this gastropod, has an internal shell. This specimen was collected in the afternoon by the drag net at 200 m. It is probably a new species. This group, called the *Lamellaria* is poorly known. Probably a new species!



A Word from the Captain

The use of sampling gear is not without unexpected moments. During the night, the drag net was caught up between rocks. Thanks to the Captain manoeuvring of the ship, it was freed and brought back on board. « It is complicated to navigate in an unknown area, but this is why we are here » he said wisely.