



Resource: 10. *Posidonia oceanica* – litter within  
and without

Appendix: 10.2 – Benefits of *Posidonia oceanica*



Artificial sand/beaches



A wide-angle photograph of a coastal scene. In the foreground, a sandy beach is marked with footprints and scattered dark seaweed. A series of low, rectangular stone structures, known as banquettes, are built along the shoreline, extending from the sand into the shallow water. To the left, a small white lighthouse stands on the beach. In the background, a green hill rises, topped with the ruins of a large stone building. The sea is a deep blue-green, with white foam from the waves washing onto the shore. The sky is clear and blue.

banquettes





banquettes





# BLUEcarbon



*Marshes*



*Mangroves*



*Seagrasses*

100+ Species Worldwide,  
Cordgrass, Bulrush, Spike  
and Needle Marsh Plants

65 Species Worldwide,  
Red, White, Black, Grey  
and River Mangroves

58 Species Worldwide,  
Star, Widgeon, Manatee  
and Turtle Seagrasses



*Diamondback  
Terrapin*



*Mangrove  
Tree Crab*

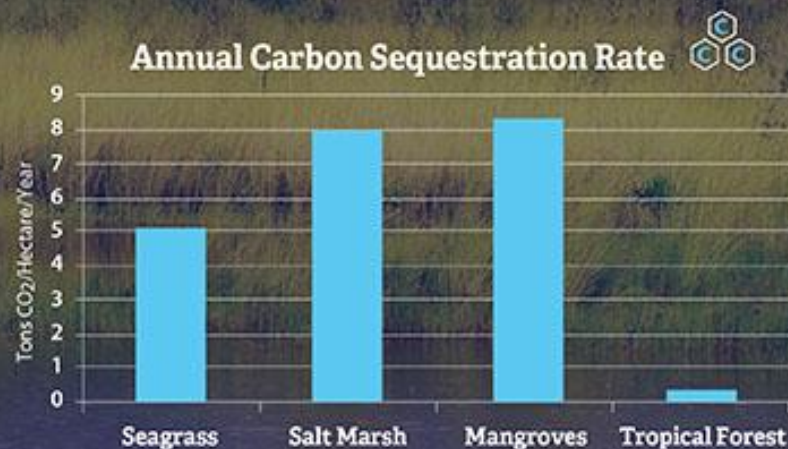


*Coastal  
Sea Anemone*

## *Natural* Carbon Capture & Storage

Blue Carbon is the carbon stored by coastal ecosystems such as tidal marshes, mangroves, and seagrasses. These coastal ecosystems are extremely efficient at sequestering and storing carbon rich sediments. In fact, they can easily store up to five times more carbon than most temperate and tropical forests.

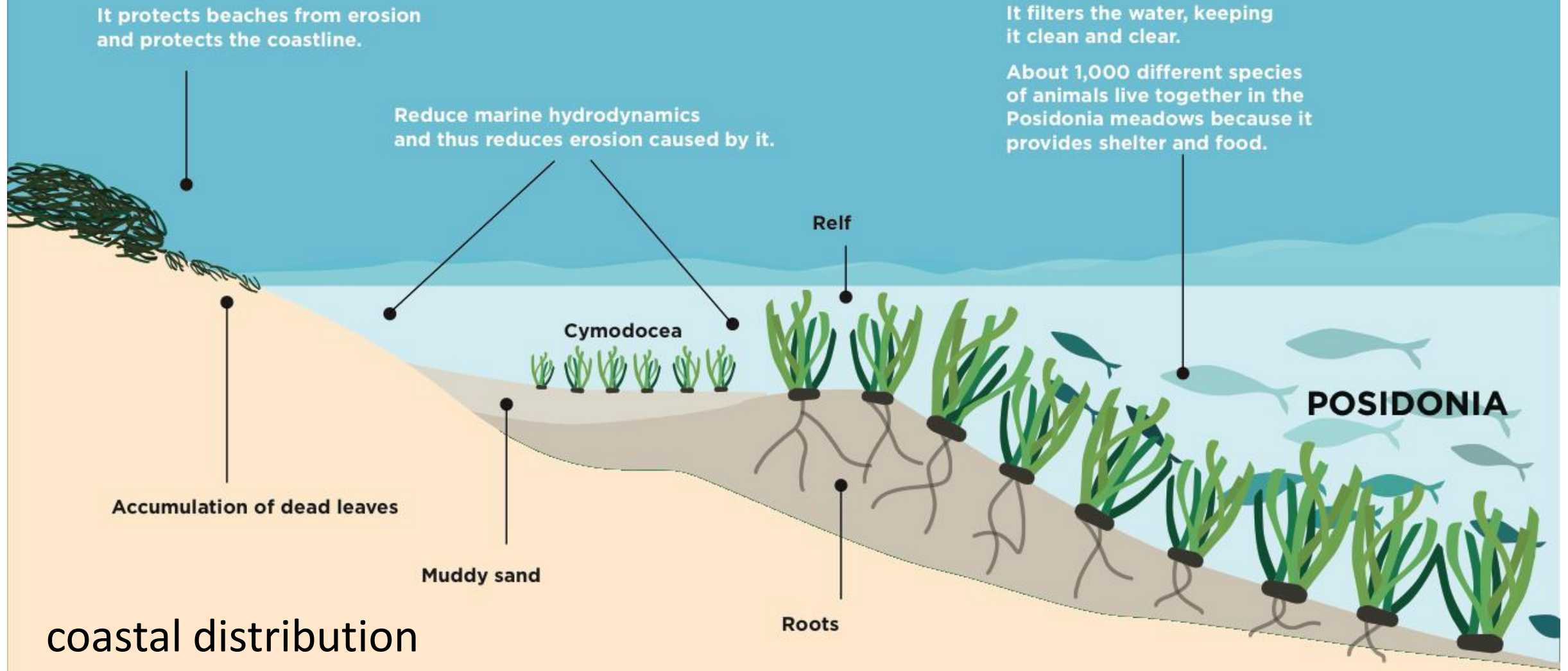
Annual Carbon Sequestration Rate



carbon capture comparison



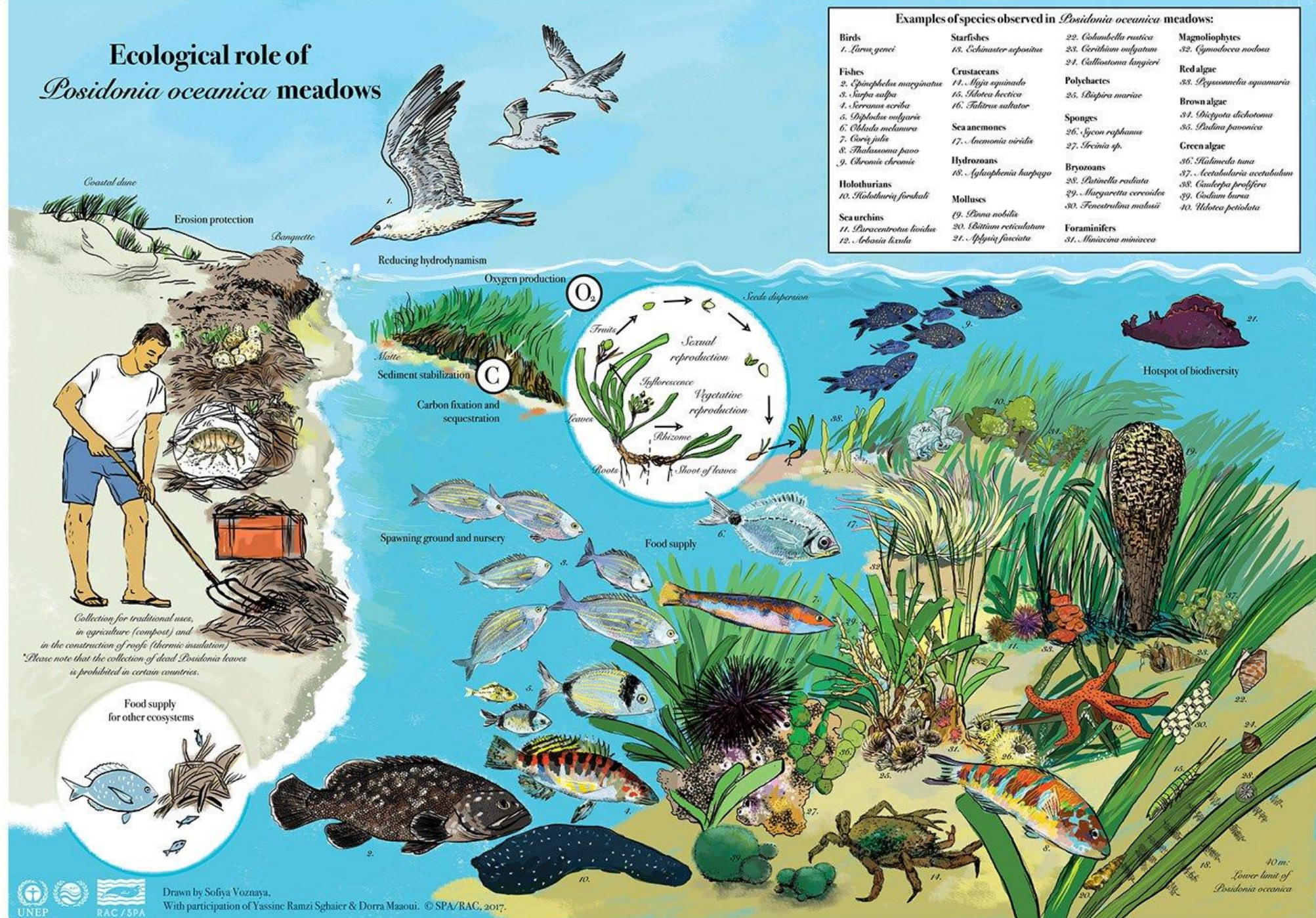
# POSIDONIA AND THE COAST LINE







# Ecological role of *Posidonia oceanica* meadows





# Forests of the seas

DODECANESE

## POSIDONIA SEAGRASS MEADOW

The protected *Posidonia oceanica* seagrass meadows, which are only found in the Mediterranean, play a crucial role as a breeding and nursery ground in coastal waters down to 50 metres depth. Over 300 species of marine plants and 1000 species of marine animals live within Posidonia meadows, including a large number of commercially important fish species.

Unfortunately, nowadays Posidonia meadows are in decline, in some cases heading towards desertification and this is more evident in the western and central Mediterranean. Some of the largest remaining extensive Posidonia meadows of the Mediterranean can be found in the Eastern Aegean waters, where they can be easily spotted on almost every coast.

