



SEAGRASS

IMAGE - POSIDONIA SEAGRASS

DID YOU KNOW?

Western Australia has the largest and most diverse seagrass meadows in the world with an unrivaled 27 species covering an estimated 20,000 square kilometers.

WHERE AT AQWA?

Next to the coral reef underwater viewing gallery, in our outdoor exhibit area.

5 METERS OF SEAGRASS PRODUCES YOUR DAILY SUPPLY OF OXYGEN WHILE SUPPORTING AT LEAST 50 FISH AND OVER 60,000 MINI MARINE CREATURES.

HABITAT MAKERS

Seagrass is an ecosystem engineer, it modifies the environment to create a habitat that other plants and animals depend upon. As seagrass grows it captures the sand with its roots and cushions the force of waves with its leaves, turning an exposed area of shifting sand into a calm, nurturing habitat that sustains life, fortifies the shore and helps coral reefs thrive.

NURSERY

In the ocean, young fish are nurtured by their environment, not their parents. Seagrass beds give young animals the structure, food and protection that they need, until they are ready for the reef. This means that seagrass has a very important job as the ocean's nursery, or day care.

PLANT POWER

Where, and how, seagrass grows helps to protect our shores.

Seagrass grows both up, down and across. Long leaves reach up and act as a barrier, reducing the force of waves and currents helping to prevent damage to our coastline from storms.

Seagrass stems grow along the sand and 90% of its mass can be found below the sand, in its roots. Together this extensive network traps sand, improving water quality and preventing erosion. Seagrasses can further improve water quality by absorbing nutrients in runoff from the land.

NICE NEIGHBOURS

Seagrass and coral reef depend on each other. Seagrass helps create the ideal conditions for coral reefs to grow and looks after the young animals that will live on the reef as adults.

Corals find it hard to grow in water with lots of stirred up sand or excess nutrients, such as nitrogen and phosphorus. By trapping sand and absorbing nutrients, seagrass creates the ideal conditions for corals.

Seagrass seeds (right)

Fiber balls (below)



DID YOU KNOW?

Growing in Shark Bay is a 4,500-year-old seagrass plant that covers over 200km² claiming the title of world's largest organism and the world's oldest colonial plant.

DID YOU KNOW?

Seagrass has existed for over 100 million years. It is older than animals such as ants, elephants, hammerhead sharks, tyrannosaurus rex and us.

UNDERWATER FLOWERS

Seagrass is not a seaweed. Seagrasses have roots, stems, leaves, flowers and seeds. Seagrass flowers are the only actual flowers that grow in the ocean and their pollen grains are the largest in the world.

WASHED ASHORE

Seagrasses lose their leaves in autumn. Waves roll these leaves into balls, that can become as big as a soccer ball! When the balls are washed ashore they fertilise our coast by bringing nutrients back to shore.

FAST OR SLOW

There are 72 different seagrasses, some are quick growing while others grow slowly. Slow growing seagrass, like *Posidonia*, have large thick leaves, lots of roots, fewer but larger seeds, spread slowly and are long lived.

Posidonia australis is only found here in Australia. Its leaves grow to over 80cm in length and it is named after Poseidon, the Greek god of the sea.

LUNGS OF THE SEA (AND LAND)

The importance of seagrass isn't restricted to the underwater world, it also helps maintain life on land. Seagrass creates air for us to breathe and captures climate change causing carbon dioxide (CO₂).

Alike plants in your garden, seagrass captures carbon dioxide from the air then, powered by sunlight, mixes it with water, to make oxygen and food. Just five meters of seagrass can make all the oxygen a person needs each day.

But that's not all - seagrass also captures and stores excess CO₂ from the atmosphere. In fact a hectare of seagrass stores 35 times more carbon than a hectare of rainforest! Seagrass can store carbon in their roots and sediments, helping to mitigate the impacts of climate change by reducing the amount of CO₂ in the atmosphere.

A VALUABLE ENTITY

Seagrass is one of the most valuable ecosystems on the planet.

As well as supporting fisheries, cleaning water, making oxygen and storing carbon, seagrass is used to make fertiliser, furniture, insulation and bandages. It is also the foundation of coastal food webs.