

ECOSYSTEM ENGINEERS

seagrass

ANCIENT PLANTS - LIVING LEGENDS

Enter the dynamic underwater world of the shallow seafloor, where ancient plants battle to transform hostile, shifting sands into a calm nurturing habitat that protects marine life and humans alike.

Incorporating themes of sustainability, conservation, science and art this excursion package will enable your students to learn what seagrass is, how it grows, why it is important and what we can do to help its survival. It includes access to all of AQWA's exhibits, as well as a specially designed program of curriculum linked activities and presentations delivered by our Education Team.

EXAMPLE TIMETABLE:

9.30am	Arrival, Welcome & Outline of Day
9.45am	Explore AQWA
10.45am	Morning tea
11.00am	Ecosystem Engineers : themed activity (See additional information for details)
12 noon	Lunch
12.30pm	Miniature Marine life: decorate a giant seagrass blade with microscopic marine life of your own creation, then learn more about seahorses and AQWA's recent release of seahorses back into the wild.
1.15pm	Guided tour (Seagrass exhibit area - small groups of 10), Visit Ocean Play, explore AQWA.
2.00pm	Regroup in ocean HQ, prepare for departure, Q&A
2.15pm	Depart

FULL DAY EXCURSION PACKAGE

9.30am - 2.15pm

Primary (PP - Year 6)

25 - 75 students

Larger groups and multiple year brackets (PP-2 | 3-4 | 5-6) please contact education@aqwa.com.au

PACKAGE INCLUDES:

- Access to all of AQWA's exhibit areas
- Full day of curriculum based activities and presentations, delivered by AQWA's Education Team
- Guided tour of AQWA's seagrass exhibit area
- Reserved area for morning tea and lunch

DIFFERENTIATION BY YEAR GROUPS:

The content of our Ecosystem Engineer session (talk and art activity) has been tailored for an early education, junior primary or senior primary group, as outlined overleaf. The overarching messages of all programs are;

- 1) by growing, seagrass changes the world around it, creating a safe place for baby animals and helping coral reefs to thrive; and
- 2) Our seagrass meadows are globally important and it is up to us to care for them.

In the art activity groups will use photosensitive dye and a variety of materials to begin the transformation of material into a community art installation "blades of change"

education@aqwa.com.au

book online: www.aqwa.com.au



THE AQUARIUM OF WESTERN AUSTRALIA

SEA FOR YOURSELF

PP - YEAR 2: NATURES NURSERY

(talk) Students discover the basic needs of marine life then learn how seagrass nurtures the next generation of coral reef animals.

(art) Using natural and man made materials students create an original artwork to express feeling safe and cared for.

CURRICULUM LINKS

Science Understanding :

PP - BIOLOGICAL SCIENCES: Living things have basic needs, including food and water (ACSSU002)

Year 1- BIOLOGICAL SCIENCES: Living things have a variety of external features (ACSSU017); Living things live in different places where their needs are met (ACSSU211)

Year 2- BIOLOGICAL SCIENCES: Living things grow and change (ACSSU030)

Arts: Visual Arts -MAKING: Exploration of natural and man-made materials when creating artwork (ACAVAM107)

YEAR 3-4: UNDERWATER FLOWERS

(talk) Learn how to tell seagrass from seaweed then discover how seagrass and corals depend upon each other to survive.

(art) Students select from a range of materials to create a specific artwork that depicts a theme of friendship and support.

CURRICULUM LINKS

Science Understanding

Year 3 -BIOLOGICAL SCIENCES: Living things can be grouped on the basis of observable features (ACSSU044)

Year 4 - BIOLOGICAL SCIENCES: Living things depend on each other and the environment to survive (ACSSU073)

Arts: Visual Arts: Making: Selection of materials to create specific artwork (ACAVAM111)

YEAR 5-6: EQUAL OPPOSITES

(Talk) Discover the structural features, adaptations and survival strategies of 2 types of seagrass then learn how, together they can transform hostile shifting sands into an enriching calm habitat that protects the shore and enables coral reefs to thrive.

(Art) Students use light and dark to communicate the idea of equal opposites.

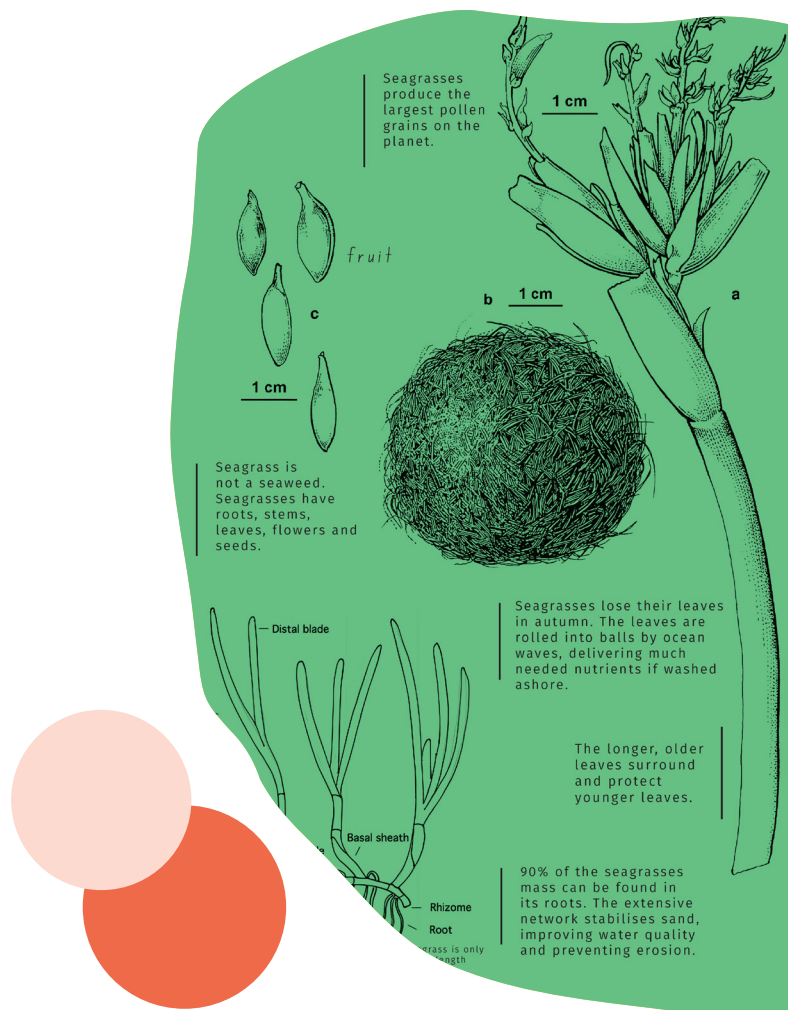
CURRICULUM LINKS

Science Understanding:

Year 5 - BIOLOGICAL SCIENCES: Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)

Year 6 - BIOLOGICAL SCIENCES: The growth and survival of living things are affected by physical conditions of their environment (ACSSU094)

ART: Visual Arts: Making: Application of visual art elements and selection of materials to communicate an idea (ACAVAM115)



LET'S MAKE OUR SEA PLASTIC FREE

"By 2050 there will be more plastic in the ocean than fish"

To prevent this prediction from coming true, AQWA has teamed up with Containers for Change. As part of this positive step for change, we are asking you to start collecting your recyclables – your glass, plastics and tetra packs, and bring them with you to AQWA. Instead of ending up in the ocean, your plastic will support the ocean as funds from any eligible containers for change are given directly to the AQWA foundation.

Established nearly two decades ago, the AQWA foundation cares for sick and injured turtles right here at the turtle pool.

Turtles are a keystone species for the ocean. This means that their survival is vital to the health of the ocean. Turtles encourage the growth of seagrass beds and ensure that there is room for all types of coral on a reef. This is why it is so important that sick and injured turtles are cared for and then returned back to the wild so that they can continue their important role and so that we can learn more about them along the way. And you can help us do it!

Start collecting your recyclables today – and we'll see you soon at AQWA!

ONCE YOUR EXCURSION IS BOOKED THE AQWA FOUNDATION WILL POST A CONTAINERS FOR CHANGE BAG TO YOUR SCHOOL.

FILL YOUR BAGS AND BRING THEM INTO AQWA WITH YOU.

FOR HELPING MAKE OUR SEA PLASTIC FREE, EACH STUDENT WILL RECEIVE A FREE CHILD RETURN TICKET.



SCAN FOR MORE INFORMATION ON PLASTIC IN THE OCEAN



foundation



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 that runoff 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.



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