Seagrass

Project Seagrass
What is Seagrass?

Seagrass is not seaweed, but a flowering plant that lives in shallow sheltered areas along the coastline. With bright green leaves and waterproof pollen, they form large dense meadows under the sea. These meadows host many animals of different shapes, colours and sizes. Seagrasses are highly vulnerable to damage from humans. It is estimated that around the world we have lost over half of our seagrass and damage is continuing, protecting what is left is vital.
Choc Chip Sea Star

The choc chip sea star is commonly observed in shallow seagrass meadows. The species is quite variable in colour and patterning but is not difficult to imagine the dark chocolate brown ‘spikes’ that dot the surface of the sea star as chocolate chips on top of a tasty cookie.
Cow Fish

This colourful box like fish with his horns is known as a longhorn cowfish. This species can often be seen swimming around in seagrass feeding on things like seaweed, sponges and worms.
Cuttlefish

Cuttlefish are a marine animal, which belongs to the same family as octopus and squid. They have eight legs and two other ‘suckers’, which they use to capture their food.

Cuttlefish lay their eggs in Seagrass so that their babies have a safe place to grow up. In the summer baby cuttlefish play among the Seagrass leaves.

Cuttlefish can change colour depending on their surroundings. They camouflage to protect themselves from predators.
Dugong

The dugong is a rare and shy animal. It is the only strictly marine herbivorous mammal and depends entirely on seagrass for its food. An adult dugong can consume up to 40kg of seagrass each day.

Dugongs can travel large distances in search of food. They are sometimes referred to as "sea cows" because their diet consists mainly of seagrass! When eating they ingest the whole seagrass plant, including the roots.
Emperor

The Emperors are a family of fish species, many of which grow and develop in the Seagrass meadows whilst they are young until they are fully grown.

Baby Emperors love Seagrass meadows. They hide and feed in amongst the leaves when they are small and they eat small snails and shrimp.
Goatfish

The Goatfish are a family of fish species, many of which grow and develop in the Seagrass meadows.

Goatfish have special hairs on their chin (called barbels) that they use to find small animals hiding in the sand that they can eat.
Octopus

Octopuses are an important predator in seagrass, eating large snails and, mussels and clams, and preying upon small fish.
Parrotfish

The seagrass Parrotfish has a sharp strong beak (just like a parrot) and uses this to feed on the seagrass. Their beaks are so sharp that when they bite seagrass it leaves behind a perfect moon shape mark on the seagrass leaf.
Pipefish

Pipefish belong to the same family as the Seahorse. It has a straight body, long nose and a tiny mouth. Pipefish swim very slowly. They live and grow in Seagrass meadows.

Pipefish love Seagrass so much they look like Seagrass! This means they can play hide and seek in Seagrass and not be seen!
Rabbitfish are one of the most common and important family of fish species to be seen in seagrass. They eat the small algae that grows on top of seagrass leaves, keeping the seagrass healthy.
Seahorse

The Seahorse is a species of small marine fish. It has a long neck, and head similar to that of a horse. Its body is long and it swims upright with a curly tail. Seahorses live in Seagrass meadows and swim very slowly.

There are lots of different varieties of Seahorses that range in size from 2cm to 35cm.
Green Turtles

Green turtles spend different parts of their lifecycles in different habitats. They lay eggs on beaches. On reaching maturity they spend most of their time in shallow, coastal waters with access to lush seagrass meadows. Young green turtles have a varied diet including, amongst other things, fish eggs, jellyfish and small invertebrates. Most adult sea turtles are strictly herbivorous eating seagrass and algae. They can eat up to 2kg of seagrass each day.
Urchin

Sea urchins are common echinoderms found throughout the Indo-Pacific. There are a number of different species. Some species such *Tripneustes gratilla* are found in a number of different colour variations and live in seagrass beds.
Wrasse

The Wrasses are a very big family of fish species, many of these colourful and fast swimming fish live in Seagrass meadows. Wrasse have strong teeth that they can use to eat food such as snails.
Uses/benefits

Gleaning

As the tide goes out each day many seagrass meadows are uncovered, revealing a huge area rich in animal life. In many places around the world, people rush out onto these seagrass meadows to collect animals such as urchins, sea cucumbers and large snails as food.
Fishing (and overfishing)

Seagrass meadows are a rich and valuable fishing ground full of many animals such as fish and crabs that people like to eat.

Overfishing is when humans catch too many fish in too short a time that nature can’t naturally replenish them. This can cause fish that have important jobs in the seagrass to disappear, like the rabbitfish which eat all the small algae.
Threats

Seagrass meadows are precious places that are easily damaged. In many parts of the world they are being damaged by the activities of humans. When people don’t understand how important seagrass is the may damage it with their boat, pollute it, or remove it for buildings.
Coastal development

Seagrass lives in places that are shallow and sheltered. These are the same places that people like to build ports, harbours and large developments such as hotels, factories and housing. If this building activity isn’t done carefully it can result in seagrass being smothered and damaged.
Boating

Boating activities in seagrass meadows can result in their damage. If the bottom of the boat hits the seagrass this can tear it up. Sometimes the engine and its fast moving propeller can also damage the seagrass.
Mangrove destruction

Mangroves are forests that live in the sea near our beaches. Mangroves are important because they hold a lot of mud and sand in amongst their roots. When we cut down mangrove forests the mud and sand is released and this can damage seagrass.
Water pollution

Seagrass are plants use the energy from the sun to grow. If the water becomes dirty then they no longer get enough sunlight and can die. When too much sewage (and other pollution) spills into the sea the water becomes dirty. To protect seagrass we need to make sure that our seawater stays clean.
For more information visit

www.projectseagrass.org