



Threats to seagrass

- human activities on land
- anything that decreases water clarity
- fertilizers/pesticides entering the ocean
- nutrients entering the ocean
- sediments entering the ocean
- dredging and coastal development
- some boating and fishing activities
- aquaculture
- docks and piers

Protecting seagrass

- reduce runoff & wastewater discharge
- avoid overboard discharge
- minimize dredging and filling
- use careful boating practices
- practice sustainable aquaculture
- build high narrow docks
- clean up coastal areas
- support Marine Protected Areas

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SeagrassNet is a global seagrass monitoring program, active throughout the Indo-Pacific. SeagrassNet scientifically monitors seagrass beds so that changes in their health and structure can be determined with accuracy over time. All data collected are sent to a website/database for display and analysis: www.SeagrassNet.org.

Besides finding new information on the status and trends of seagrass health, SeagrassNet is committed to the long-term protection of seagrasses. SeagrassNet monitoring has shown that seagrass near populated and rapidly developing areas does poorly, while seagrass in more remote, pristine and protected areas, is still largely healthy.

Indo-Pacific Seagrass



Seagrasses

- Underwater flowering plants
- Valuable coastal ecosystem
- Form vast meadows to small patches
- 24 species in the Indo-Pacific
- Nurseries, shelter and food for fish
- Dugongs & sea turtles eat seagrass
- Recognize and protect them

Indo-Pacific Seagrass




Thalassia hemprichii

- Flat leaves 10-60cm and rhizomes with scale leaves



Enhalus accoroides

- Strap-like leaves with inrolled margin, 30-150cm and rhizomes with bristles




Syringodium isoetifolium

- Round leaves 10-60cm



Cymodocea serrulata

- Flat leaves 6-20cm with serrated tips, often on a short stem



Halodule uninervis

- Thin, flat leaves with 3-pointed tips, 15cm




Cymodocea rotundata

- Flat leaves 7-15cm with rounded tips



Halophila decipiens

- Paddle-shaped leaves, with serrated edges and leaf hairs, 1-2cm



Thalassodendron ciliatum

- Sickle-shaped leaves 15cm with serrated tips on long stem; woody rhizomes



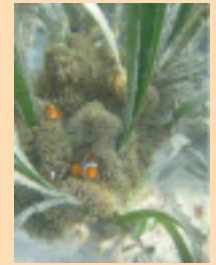
Halophila ovalis

- Smooth oval leaves, 1-3cm

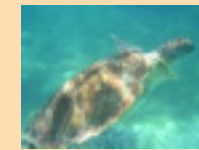
Several other seagrass species occur in some areas of the region. (World Atlas of Seagrasses: Green and Short 2003)

Seagrass functions and values

Seagrass contributes to a healthy coastal marine environment. Seagrass provides habitat for commercially and recreationally important fish and shellfish species. It is a nursery for young marine creatures. Seagrass filters the water of sediments and pollution. The seagrass root mat adds stability to the coastal zone, and seagrass leaves lessen the impact of wave energy on the shoreline. As dead seagrass breaks down, it becomes part of the coastal food chain, supporting snails, shrimp, beche de mer, and fish. Throughout the Indo-Pacific, people harvest sea food from seagrass meadows as a major source of protein.



Dugongs and turtles



Dugongs and sea turtles eat seagrass, as do some fish and birds. In vast seagrass meadows, divers and snorkelers can observe "feeding trails" of dugongs, where these sea mammals have plowed along the bottom, eating seagrass as they go. A healthy seagrass resource is essential to dugongs and turtles.

Reef – seagrass - mangrove connection

Seagrasses, mangroves, and coral reefs form a three-part marine coastal ecosystem. Each part contributes to a healthy ocean. Mangroves filter the water coming off the land and create a stable shoreline. Seagrass further filters runoff and provides nursery areas for many of the fish that live in coral reefs as adults. Seagrass, as it dies and decomposes, provides a link in the food chain essential to coral reef animals. The seagrass-coral reef environment is a productive area of high biodiversity and beauty. Together, healthy seagrasses, mangroves, and coral reefs create a coastal resource for fisheries and tourism.

