

This project is jointly funded by these partners and the Australian Government under the National Environmental Science Program.



Working together
as a team
Traditional Owners
Scientists

Seagrass meadows

Northern Territory's most significant seagrass (*maraman*) meadows are in the south-west Gulf of Carpentaria in Yanyuwa sea country (*ma-lhanngu*).

Culturally important ecosystems

Yanyuwa people recognise dugong and sea turtles as co-dependent (*nganji-kin*) and 'kin' to the seagrass (*walya nyiki-naanji ki-maramanngu*). Dugongs and turtles rely on seagrass for food, and seagrass needs grazing to stay healthy. Seagrass and mangroves that fringe islands (*na-wurndarnda*) are also valued as nurseries for juvenile fish and prawns.

Growing our knowledge

More than 3000 intertidal and subtidal plots along 130 km of mainland and island coastline were surveyed. Observers examined each plot from a low-hovering helicopter to estimate the coverage of seagrass, benthic macroinvertebrates, and algae. Biomass and species composition were evaluated using tethered quadrats, positioned over the substrate.

- 44% of plots had seagrass
- 33% of plots had algae
- 16,000 ha of seagrass were mapped
- Seven seagrass species grow in the region
- Mainland coastal meadows extended up to several kilometres
- Seagrass grew around the islands amongst rock and reef
- Dugongs and turtles' favourite seagrasses were common – disturbance-adapted *Halodule uninervis* and *Halophila ovalis*

Working together

Yanyuwa sea country is managed by the li-Anthawirriyarra Sea Ranger Unit. For this project, the Unit has teamed up with scientists to get better data on seagrass habitats.

What's next?

A strong foundation is in place for future monitoring work. Rangers now have a baseline they can use to detect changes in benthic habitats over time, and this will help with understanding what drives them.

Sharing knowledge

Working together helped scientists and Rangers broaden their knowledge and skills. Scientists better understand traditional science and the cultural importance of sea country to Yanyuwa. Rangers have developed experience in scientific research methods, including computerised mapping.



Scan the QR code and visit the NESP Marine and Coastal Hub website for more information.

Mapping the benthic habitats of Yanyuwa Sea Country