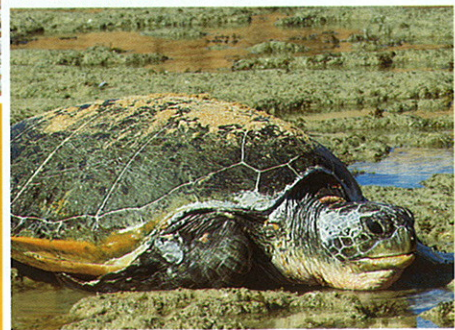


# Marvellous mangroves and mud: proposed Regnard Marine Management Area



Together with the proposed Dampier Archipelago Marine Park to the north, the proposed **Regnard Marine Management Area** will soon be one of the State's newest marine conservation reserves. Its main claims to fame are mangroves and mud.

by Fran Stanley



**T**he proposed Regnard Marine Management Area, formerly known as the proposed Cape Preston Marine Management Area, straddles the mainland coast west of Dampier and covers an area of approximately 62,000 hectares. It extends from Eaglehawk and West Intercourse islands eastwards to South West Regnard Island and seaward to approximately 20 kilometres from the coast. The marine plants and animals of the reserve are predominantly tropical species. The area contains large areas of sand, mud and silt. Such soft sediment habitats generally support an abundant and species-rich invertebrate fauna of molluscs (including five species of gastropod found only in the region), polychaete worms and crustaceans. However, as this invertebrate fauna has not been well studied it is possible that new species may be found in this area. It's also highly likely that species known from the proposed Dampier Archipelago Marine Park will occur in this area.

### Haven for birds, plants and mammals

Numerous species of shorebirds, including migratory species, such as plovers, curlews and sandpipers, can be seen feeding in the productive soft-sediment habitats around the Regnard area. There are three seabird breeding islands in the proposed reserve. Species recorded breeding here include the



wedge-tailed shearwater, white-bellied sea-eagle, osprey and Caspian tern.

Areas of limestone reef are often covered in large fleshy seaweeds such as sargassum or turf species and support invertebrates such as sponges, sea squirts and soft corals. Scattered areas of seagrass are also found in the reserves interspersed with large seaweeds. The three large islands found in the reserve, North East Regnard, South West Regnard and Eaglehawk, have limestone reefs around them.

Mangrove communities, fronted by intertidal sand and mudflats, are a common feature of the mainland shore. White mangroves (*Avicennia marina*) and red mangroves (*Rhizophora stylosa*) are very common. Yellow-leaf spurred mangrove (*Ceriops tagal*), club mangrove

(*Aegialitis annulata*), ribbed-fruit orange mangrove (*Bruguiera exaristata*) and river mangrove (*Aegiceras corniculata*) also grow in the proposed reserve. Mangrove communities are home to many gastropods and other invertebrates and are important habitats for birds such as the mangrove whistler and brahminy kite. Mangroves also provide sheltered areas for juvenile fish, crustaceans and turtles. Green turtles may eat the leaves of these saltwater-loving trees.

Dugongs are frequently sighted in the proposed marine management area and feed on seagrasses that grow in the soft sediments between West Intercourse Island and Cape Preston. These shy marine mammals have a very low reproductive rate. Females may live to 70 years of age but don't produce their first calves until 12 to 17 years of age. The interval between births may vary between three and seven years. Dugongs reportedly



#### Previous page

**Main** White mangroves with breathing roots.

Photo – Marie Lochman

**Insets** (clockwise from top)

White-bellied sea-eagle.

Photo – Sallyanne Cousans

Sea squirts.

Photo – Clay Bryce/Lochman

Transparencies

Green turtle.

Photo – Jiri Lochman

Crab.

Photo – DEC

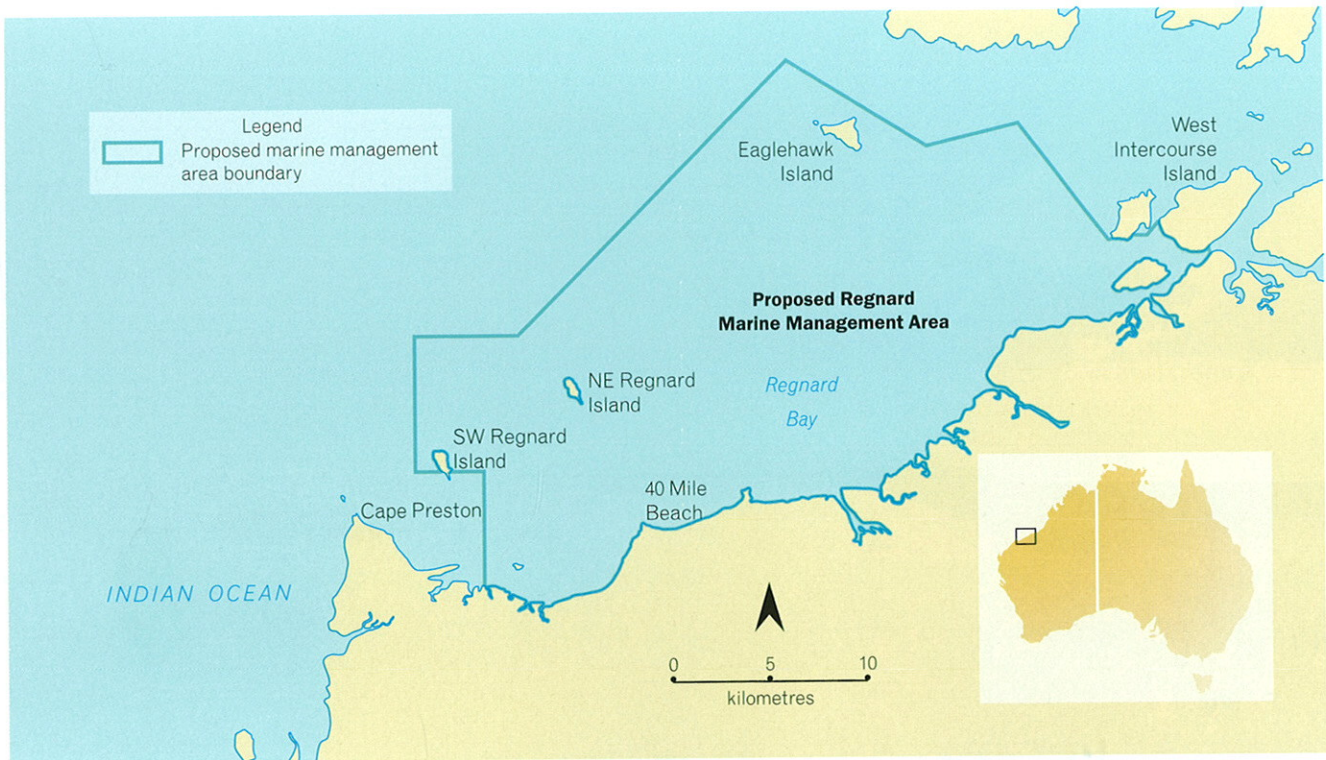
**Above** Sea slug.

Photo – John Huisman

**Left** Dugong calf with its mother.

Photo – Geoff Taylor/Lochman

Transparencies



**Right** Mangrove prop roots.  
Photo – Lauren Monks/DEC

**Far right** Wreck of the *McCormack*,  
Eaglehawk Island.  
Photo – Peter Dans/DEC

give birth in very shallow water. The single calf stays close to its mother for 18 months or more. Although dugongs begin to eat seagrass within two weeks of birth, females continue to suckle their young during their long association. Young dugongs hide above their mother's back when danger threatens.

Humpback whales may pass through the area during their southerly migration to Antarctic feeding grounds and mothers and their calves may be seen resting in Regnard Bay.

### Human activity in Regnard

Use of the Regnard area is dominated by commercial and recreational fishing. It is also used for other recreational activities, aquaculture, scientific research and nature appreciation. Infrastructure to support the petroleum and mining industries may become a feature in the future.

The area is particularly important for commercial prawn trawling and is used by boats licensed in the Onslow Prawn Trawl Fishery. Prawn catches are related to summer rainfall, with high catches of tiger prawns recorded during periods with abundant summer



rain. The mangrove communities and creek systems provide shelter and food sources for juvenile prawns, which then move out into open water as adults.

Recreational fishing is a highly popular pastime in the Regnard area and the proposed Dampier Archipelago Marine Park. Line fishing, netting and spearfishing are used by fishers to target a variety of fish species, mudcrabs, rock lobsters and other invertebrates. Popular species include mangrove jack, barramundi, mackerel, coral trout and spangled emperor.

One wreck is known in the proposed Regnard Marine Management Area. During Cyclone Orson in 1989 the *McCormack*, a dredging barge, broke its moorings off West Lewis Island, in the proposed Dampier Archipelago Marine Park just to the north, and was wrecked on Eaglehawk Island.

Three conservation areas have been suggested to protect important plants and animals in the proposed Regnard Marine Management Area. Of these, the proposed South West Regnard Island and South Eaglehawk Island conservation zones (flora/fauna protection) are home to intertidal reefs, subtidal soft-bottom habitats, intertidal mudflats and mangroves. The proposed Maitland conservation zone (mangrove protection) protects diverse mangrove communities from human activities.

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Interpretative signage, displays and facilities heighten visitor appreciation of an area's natural and cultural wonders. But how is it done?
- 56 Healthy Parks, Healthy People  
A program promotes the benefits of time spent in the natural environment.

## Regulars

- 3 Contributors and Editor's letter
- 23 Bookmarks  
*North-West Bound*  
*Phillip the Penguin*  
*Community Voices, Creating Sustainable Spaces*
- 31 Endangered  
Noisy scrub-bird
- 48 Feature park  
Herdsman Lake Regional Park
- 62 Urban Antics  
Quendas in the park

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