NINGALOO COAST
WORLD HERITAGE

Department of Biodiversity, Conservation and Attractions

PARKS AND WILDLIFE SERVICE

MYINGGULU

Summer | 2021

World Heritage Outlook for the Ningaloo Coast

The IUCN has released the 2020 World Heritage Outlook report. This global assessment of all World Heritage properties is an important monitoring step to recognise the current state of World Heritage values, threats to these values, and to assess how effective protection and management of these values are. The individual World Heritage property assessments help to determine whether conservation prospects are improving or deteriorating for protected areas worldwide.

The Ningaloo Coast has deteriorated since the previous assessment in 2017 from 'Good' to 'Good with some concerns'. What does this mean? Our World Heritage values are currently in good condition and are likely to be maintained in the long term, provided that minor additional conservation measures are put in place to address existing concerns.

The World Heritage Outlook assesses both current threats to World Heritage properties where impact is already visible, and potential threats which could affect a site in the future.

Read the full report here:

worldheritageoutlook.iucn.org/explore-sites/wdpaid/555542338

Above: Coral reefs are one of the many natural habitats within the Ningaloo Coast World Heritage Area.
Photo – *Johnny Gaskell*

Sharing knowledge on country

Above: Majun balygura (turtle rookery) signs have been installed at key turtles nesting sites along the Jurabi Coast.

One of the many benefits of DBCA's Joint Management Agreement with the Nyinggulu Ganyarajarri, the traditional owners of the Nyinggulu (Ningaloo) Coast is being able to learn from their deep connection with this special place. A vision of the joint management partnership is to share this knowledge with both locals and visitors alike to enrich their experience and understanding of the Ningaloo Coast.

Mujan (turtles) are an extremely important species to traditional owners. They feature strongly in dreaming stories and as a totem to the Baiyungu Tribe of the Ganyara people. The global significance of the Jurabi Coast as a majun balygura (turtle rookery) is also a big part of why the area is World Heritage Listed and makes 'Mujan conservation' a big part of what we do.

The new interpretive signage along the Jurabi Coastal Park at key majun balaygura (turtle rookery) sites celebrates the significance of mujan to the traditional owners and provides guidance for visitors and locals on how to view them respectfully. The majun balygura (turtle rookery) signage project is a brilliant example of joint management in action, combining traditional knowledge with best practice conservation to create sustainable wildlife viewing opportunities.

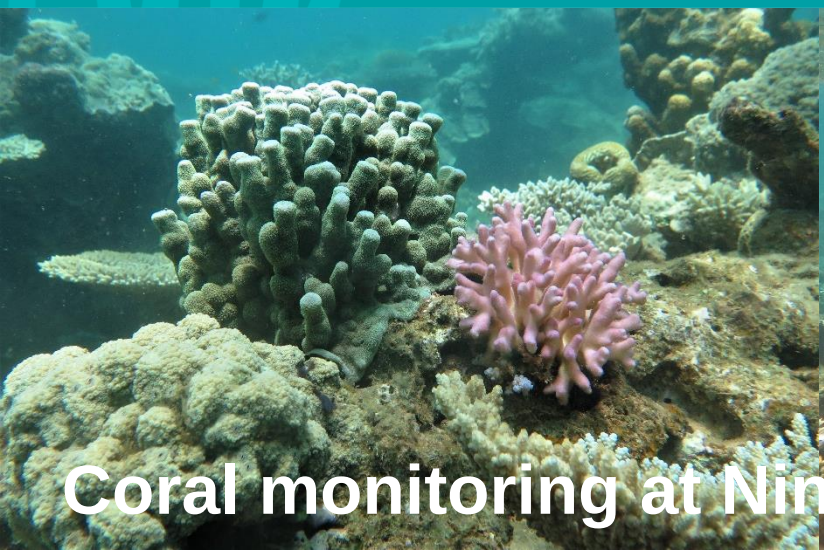
Supporting turtle conservation along the Ningaloo Coast

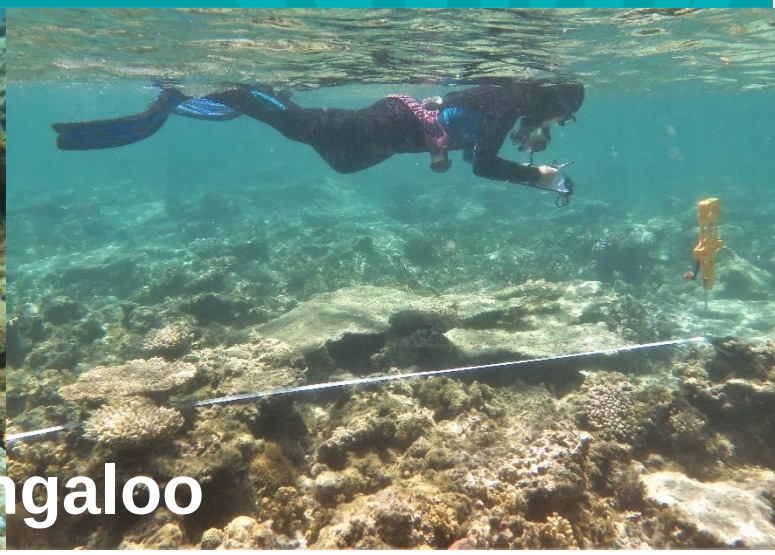
The Jurabi Coast situated on the western side of the Cape Range Peninsula is recognised internationally as critical habitat for turtle reproduction. Each year turtles migrate to beaches along the coast to mate in the lagoon and come ashore to lay eggs. The Jurabi Coast is a popular recreational spot with the local community and visitors.

Collaboratively Parks and Wildlife and the Shire of Exmouth have recently completed substantial works to upgrade and relocate Five Mile and Bauden carparks back behind the dune system. Brooke carpark has been permanently closed. The work has provided protection for critical turtle nesting habitat and enhanced the protection of the fragile coastal dune system.

We would like to thank the Australian Heritage Grants Program for providing funding to assist with the protection and conservation of World Heritage values along the Ningaloo Coast. We would like to thank the Shire of Exmouth, the Nyinggulu Coast Joint Management Body and the Ningaloo Coast World Heritage Advisory Committee for supporting the project, what a fantastic outcome for the Ningaloo Coast!

Top right: Nesting turtles are already taking advantage of the rehabilitated section of beach which only a couple of months ago was a car park. **Bottom left:** 5 Mile car park prior to relocation.





Coral monitoring at Ningaloo

There are more than 200 species of coral at Ningaloo supporting a highly diverse ecosystem with more than 500 species of fish, 600 species of molluscs and 200 species of echinoderms (starfish, urchins and sea cucumbers). Each year, Exmouth DBCA and researchers from the Marine Science Program monitor corals within Ningaloo Marine Park to assess their condition.

Coral monitoring began at Ningaloo in the early 1990s resulting in what is now one of the most consistent long-term studies of corals in the world. Monitoring changes in the condition of coral reefs over time is fundamental in understanding how Ningaloo's coral reefs respond to changing environmental conditions, and if they can survive stresses including rising sea temperatures.

Seawater temperatures during the 2020-21 summer are predicted to be warmer than the long-term average due to the La Niña weather pattern. DBCA will deploy small terracotta tiles in February 2021 prior to the annual coral spawning event to measure the number of newly settled corals to understand the influence of the La Niña-driven warming event on coral recruitment at Ningaloo. Monitoring the arrival of new coral recruits helps us understand the changing health of the reef and the potential for recovery in areas that have declined. Twenty three long-term sites were surveyed in November 2020. Corals will be surveyed again in 2021 to continue our understanding of changes in coral reef condition, which will inform future resilience-based management and conservation.

Above left: Corals at the Muiron Islands. **Above right:** A researcher conducting coral monitoring at Ningaloo.
Photos *– Claire Ross/DBCA*

Revealing the hidden secrets of the coastal ocean

A pair of ocean monitoring stations have recently been installed along the Ningaloo Coast at Point Billie and Jurabi Beach. The monitoring stations, visible as a line of antennae and solar panel arrays, are part of the Integrated Marine Observing System (IMOS) that has been recording Australia's coastal and open oceans since 2006.

The two stations are used to map ocean surface currents along the coast at 7km resolution out to 150km offshore. The data are available at hourly intervals in near-real time and are freely accessible to the public. The data will help researchers to better understand ocean processes in the region, support local fisheries, and aid in the protection of Ningaloo Reef.

These ocean radar monitoring stations operate by transmitting low power radio wave signals out to sea. Ocean waves reflect the signal back to land, where it is recorded through the array of antennae on the beach. A computer processes this information in near real time and allows for visualisation on the web as maps of surface currents that might even help you find that magic fishing spot. For more information: https://imos.org.au/ and imos.org.au/facilities/oceanradar

Below: The IMOS Ocean Radar monitoring station at Point Billie.
Photo - Yasha Hetzel, University of Western Australia

When cats are away, the native animals come out to play!

Feral cat and fox control continued in 2020 in Cape Range National Park and the surrounding government managed lands. The targeted feral cat work has been ongoing since 2014 when the new 1080 bait ‘Eradicat’ was still being trialled. The ‘Eradicat’ bait was found to be effective at cat control and had no impact to non-target native species that occur in WA.

Intensive remote camera monitoring across Cape Range National Park and through the entire baited area helps assess the level of effectiveness on the feral cat population. The impact from year to year varies but the overall trend since 2014 has shown a decline in feral cat numbers and a virtual eradication of foxes from the North West Cape!

The continued pressure on cat numbers has resulted in some new detection of cat vulnerable species on the cameras. The false fat-tailed antechinus, although known to the area, has not been captured on camera until this recent survey. This species weighs around 30g, making it a perfect sized snack for a cat or a fox. It has likely persisted on the cape due to its preference of rocky habitat, a perfect refugia to escape the clutches of a predator.

For some species such as the brown quail, their presence in the national park also shows the pressure from feral cats is at a level that they can survive.

This work will continue into 2021 with the assistance from the team in DBCA *Western Shield* program.

Above top: Feral cat with a false fat- tailed antechinus captured prior to the cat baiting program.

Above: Presence of brown quals in Cape Range National Park.

Creature feature

The desert mouse (*Pseudomys desertor*) was recently spotted in Cape Range National Park during a DBCA survey. Up until recently there had only been fossilised remains of the desert mouse in the Ningaloo area.

Endemic to Australia, the desert mouse inhabits arid regions favouring habitats with sand dunes with spinifex and rocky outcrops where they can make shallow burrows.

Predation from introduced species like the feral cat and fox and competition from house mouse and black rats put pressure on the desert mouse to survive.

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