



Department of **Biodiversity**, **Conservation and Attractions**





Winter | 2021

In this issue: Sharing knowledge: Nyinggulu Seasonal Calendar Project | A seaweed summer house of fish Turtles galore! | Ningaloo Coast World Heritage 10 year anniversary | Migratory shorebirds flock to our shores Exmouth ArtQuest 2021 – Celebrating a decade of World Heritage along the Ningaloo Coast! | Fun Fact



Sharing knowledge: Nyinggulu Seasonal Calendar Project

One exciting joint management project Traditional Owners and Parks and Wildlife Service have been working together on is the creation of a seasonal calendar that represents traditional ecological knowledge of the Nyinggulu (Ningaloo) Coast. The calendar will illustrate how Traditional Owners have always understood the movements and cycles of animals and how the flowering and fruiting of particular plant species signal the right time to hunt and gather as the seasons change.

The calendar will feature everything from our iconic species such as whale sharks, humpback whales and manta rays right down to some of the lesser known but extremely important creatures like the burrowing bee, ghost crab and the migratory shorebirds which are all interconnected and hugely important to Traditional Owners.

The calendar includes many of the features that convey the outstanding universal value (OUV) of the Ningaloo Coast World Heritage property and is a great way to highlight the inherent link between natural and cultural values.



Above: Traditional Owners proudly display their work in progress calendar at workshop session in February. **Above right:** The process of choosing photos to represent plants, animals and landscapes of Nyinggulu.

We expect the calendar to be complete midway through this year and are looking forward to sharing it with the community.



A seaweed summer house for fish.

Extensive meadows of seaweed are a natural feature of the Ningaloo lagoon and a key feature of the World Heritage property. During the summer months canopy forming species often grow to over a metre tall. This under water forest provides food and shelter for a plethora of sea creatures, including parrotfish, wrasse, and cod.

During the summer months larval fish also arrive from oceanic waters in large numbers. Some of these young fish take shelter in the coral and rubble on the reef, but others such as Spangled and Yellow Tailed Emperor settle exclusively into the seaweed meadows. Seaweeds are therefore an important habitat during the early lives of these fished species. Accordingly, Department of Biodiversity Conservation and Attractions and AIMS scientists have been conducting research to understand why some seaweed fields attract more fish than others and why some years we get exceptional numbers of young fish settling in the seaweed. Results to-date indicate that it is often areas with the tallest seaweed that have the most baby fish, whilst abundance of these youngsters is typically greater in La Nina years, when the Leeuwin current is at its strongest. This information is helping us to identify areas that are nurseries for young fish and improves our understanding of why adult fish numbers can vary naturally over time.

Above left: A seaweed meadow in the Ningaloo lagoon Above right: A young Spangled Emperor, only a few centimetres long, sheltering within a seaweed meadow. *Photos -* DBCA



Above: A female green turtle returning to the ocean. *Photo* – Kalpa Vekaria

Turtles galore!

Over 5000 volunteer hours, 5100 turtle tracks and nests recorded and 40 breeding female turtles rescued have kept the Ningaloo Turtle Program (NTP) volunteers busy!

The 2020/21 Ningaloo Turtle Program monitoring season has drawn to a close, and what a season it's been. Local and external volunteers spent 40 days this season monitoring turtle nesting activity on beaches along the Jurabi Coastal Park, Bungelup rookery down in Cape Range National Park and Janes Bay in the Nyinggulu Coastal Reserve. The monitoring captures three weekends pre and post peak nesting season as well as an intensive 28-day period over the peak of the nesting season.

Initial data shows that this season was the second busiest in the 19 years of the NTP!

The Ningaloo Coast provides critical habitat for turtle reproduction for green, loggerhead and hawksbill turtles. Turtle diversity and available nesting habitat are key features of the World Heritage listing. The data collected through the NTP is fundamental to the ongoing management and protection of turtle species along the Ningaloo Coast.

Thank you to all the NTP volunteers for their hard work!

Ningaloo Coast World Heritage 10 Year Anniversary.

This year marks the 10th World Heritage anniversary for the Ningaloo Coast. Parks and Wildlife Service and the Ningaloo Coast World Heritage Advisory Committee have the celebration planning well under way, furthering partnerships with the local community and key stakeholders for the World Heritage property.

Inscribed on 24 June 2011 for its striking landscapes and seascapes, large intact marine, coastal and terrestrial environments and significant biological diversity found within, the Ningaloo Coast is recognised as one of the most special natural places on earth. World Heritage properties are places that are important to, and belong to, everyone in the world, regardless of where they are located. They are an irreplaceable legacy that the global community has decided to protect for the future. There are over 1000 properties on the World Heritage List. Australia has 20 properties on the World Heritage List. All properties have been listed for their outstanding universal value (OUV), meaning they contain values that are exceptional from a global perspective and need to be protected for future generations. World Heritage properties are the most remarkable places on earth.

Keep an eye out for celebrations of World Heritage along the Ningaloo Coast!



Above: Ningaloo from above showing the striking contrast of the turquoise waters of Ningaloo Reef against the rugged arid Cape Range. *Photo* - Blue Media Exmouth

Migratory shorebirds flock to our shores.



Above: A mixed flock of the critically endangered bar-tailed godwits and great knot take flight at Gale's Bay. Some of these migratory birds are already showing breeding colours whilst they are taking refuge in the warmth of Exmouth Gulf. *Photo* – Grant Griffin

Summer shorebird counts along the Ningaloo Coast and Exmouth Gulf produced exciting results with nearly double the species and more than three times the numbers at some sites compared to previous years.

Grant Griffin, local Exmouth naturalist said "Three of the four critically endangered shorebirds known to the area were sighted at Gales Bay in the January 2021 count, which just highlights the noted international significance of Exmouth Gulf for migratory shorebirds".

The shorebirds use Exmouth Gulf for refuge and for foraging over the summer months before they fly back to the northern hemisphere to breed.

The high numbers of shorebirds surveyed this summer may have been influenced by the turbulent conditions with a lot of instability experienced in the weather this year.

Exmouth ArtQuest 2021 – celebrating a decade of World Heritage along the Ningaloo Coast!

Parks and Wildlife Service and the Ningaloo Coast World Heritage Advisory Committee have partnered with the Exmouth Cultural Arts Centre to celebrate the upcoming World Heritage anniversary milestone.

The 2021 theme for the annual Exmouth art event is "Celebrating a decade of World Heritage along the Ningaloo Coast", in recognition of the 10th anniversary of the Ningaloo Coast's inscription to the World Heritage List, on 24 June 2011. We appreciate the local arts community supporting the celebration of World Heritage and providing an opportunity to present, transmit, share and enjoy the unique World Heritage values through a celebration of art with all of the World Heritage community.

ArtQuest will showcase the wonders of the Ningaloo Coast from 28 May – 25 June 2021 at the Tantabiddi Travelling Gallery, Ningaloo Centre, Exmouth.





Fun Fact!

Did you know there are currently three World Heritage properties in Western Australia managed by DBCA. Shark Bay, Purnululu and Ningaloo Coast World Heritage properties are listed for their outstanding universal value and unique natural features. Murujuga is currently on the tentative list to gain World Heritage status in recognition of its unique cultural, spiritual and archaeological values.

In partnership with Traditional Owners we recognise the continuing deep reciprocal connection to the land and sea and the inherent link between natural and cultural aspects of World Heritage properties in WA.

Left: This cute little thorny devil (*Moloch horridus*) is one of the many reptile species found within the Ningaloo Coast World Heritage Area. *Photo* - Cait Taylor/DBCA

To receive a copy of this newsletter electronically please subscribe via pws.dbca.wa.gov.au/news/newsletters

Department of Biodiversity, Conservation and Attractions, Parks and Wildlife Service – Exmouth District 20 Nimitz Street, Exmouth, WA, 6707 Phone: (08) 9947 8000 Email: exmouth@dbca.wa.gov.au