



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





Autumn News | 2022

In this Issue: Thanardinyungujarri – The Seasons of Nyinggulu | How important are seaweed habitats for small-scale tropical fisheries? Oil spill response training | Fire in the range | Protecting native species along the Ningaloo Coast Interacting with whale sharks

Thanardinyungujarri – The Seasons of Nyinggulu

Regular readers of the Ningaloo Coast News will recall back in the Winter 2021 edition that we shared a sneak peek at the Nyinggulu Seasonal Calendar as a work in progress. Today, the Nyinggulu Joint Management team is delighted to share the finished product with the Nyinggulu (Ningaloo) community.

This project has been a labor of love since it was first scribbled on a whiteboard at Cardabia Station in August 2018. Baiyungu Traditional Owner Hazel Walgar expressed that 'a seasonal calendar was something I always wanted to do. I am proud to share Nyinggulu seasons with visitors and our future generation of Baiyungu tomorrow.'

The Nyinggulu Seasonal calendar is the first to be produced in joint management with Traditional Owners and Parks and Wildlife Service in Western Australia. Additional support from Dr. Emma Woodward from CSIRO, who has extensive experience assisting Traditional Owners to channel their knowledge into seasonal calendars has been an invaluable contribution to this project.

Over the past three years, with Emma's support and a dedicated group of Elders, a series of focus groups and community workshops were held to collect and collate all the Traditional Ecological Knowledge into the wheel format. To bring these traditional knowledge stories to life, many of the incredible photographers in the community generously donated their work for use in this project.

The depth of knowledge within the Nyinggulu Seasonal calendar is a testament to a genuine Joint Management relationship here on the Nyinggulu Coast. The Nyinggulu Joint Management team is excited to share this piece of art with the community, so please visit Milyering Discovery Centre in Cape Range National Park to have a close look for yourself. Thank you to all the contributing photographers and our Joint Management Partners.



Above: Hazel Walgar, Cultural Advisor and Tom Nagle, Joint Management Officer proud to show off the Nyinggulu Seasonal Calendar.

How important are seaweed habitats for small-scale tropical fisheries?

Canopy forming seaweeds are common in the Ningaloo lagoon, often creating large meadows which provide shelter and food for a range of fish and invertebrate species. Of particular interest are emperors (Family Lethiridae) and cods (Family Serranidae), which are an integral component of the recreational fisher catch.

Annual surveys conducted by scientists from the DBCA and the AIMS focusing on seaweeds and coral reefs have quantified how often these fish can be found in the different habitats along the Ningaloo Coast, during both adult and juvenile stages of their lives. Combining this with fisheries catch data, periodically collected by the Department of Primary Industries and Regional Development, DBCA have estimated that seaweed associated fishes regularly account for most of the recreational catch at Ningaloo.

Since 1998, there have been four published assessments of



Above: *Lethrinus nebulosus,* commonly known as spangled emperor from the family Lethrinidae.

the catch composition at Ningaloo and seaweed associated fish have always represented more than 60 percent of reef fish retained by recreational fishers (primarily Spangled emperor and Charlie-court cod). Seaweed associated species are also important to fisheries in the Philippines and Kenya, whilst in many island nations in the Pacific, they are less important. Information from 133 fisheries, collected from 28 countries, indicate that seaweed associated fishes typically account for about a quarter of the catch, suggesting seaweed habitats are a valuable contributor to fisheries around the world. However, very few species rely on a single habitat type and sound management of the reef and associated services should consider all habitats and how they are connected to each other.

These findings have been recently published in the journal Fish and Fisheries which can be downloaded from <u>https://</u>onlinelibrary.wiley.com/doi/10.1111/faf.12653



Above: *Epinephelus rivulatus,* often referred to as chinaman cod, halfmoon grouper or Charlie Court are from the family Serranidae.

Oil spill response training

Department of Biodiversity Conservation and Attractions (DBCA) staff recently participated in an oil spill response exercise in Geraldton, hosted by the Department of Transport (DoT). Oil spill response exercises are held each year at different locations across the state, they are critical in ensuring preparedness in the event of a large-scale spill. This exercise brought together a range of agencies, including Midwest Ports, Department of Fire and Emergency Services, Department of Primary Industries and Regional Development, DBCA, DoT and the ChemCentre.

DBCA is the lead agency for the oiled wildlife response component of these exercises. Staff received training in establishing primary care facilities, animal washing containers, veterinary management, evidence collection, and cleaning and drying of wildlife.



Above: Wildlife response unit.

Fire in the range

The North West Cape has seen little fire activity over the past three decades, with the exception of two bushfire events in 1990 and 2012. The infrequency of bushfire has contributed to an accumulation of fuel, primarily spinifex and acacia shrublands along the Cape. On Monday, 14 February 2022, a lightning strike ignited a fire at Charles Knife in Cape Range National Park. Over twelve days, the fire burnt around 7300 hectares of national park, unallocated crown land and a part of Exmouth Gulf Station. Burning in rugged and mainly inaccessible terrain, fixed-wing water bombers were brought in to help ground crews fight the fire. The fixed-wing water bombers contributed significantly to the control of the fire and executed more than 100 drops, each at over 3,500 litres.

Throughout the bushfire, more than 100 Parks and Wildlife Service firefighters and incident personnel from across the state were in attendance with on-ground support from the Department of Fire and Emergency Services WA, Exmouth Volunteer Fire and Rescue Services, Exmouth State Emergency Service, Western Australia Police Force, Shire of Exmouth, Royal Australian Air Force, Water Corporation, Main Roads WA and Horizon Power. Local businesses and the community also provided valuable support through catering services, accommodation and contractors, which was vital to the success of the event and greatly appreciated.

Now the seasons are changing, Parks and Wildlife Service is starting the preparation for prescribed burning. Prescribed burning is the process of planning and applying fire to a predetermined area, under specific environmental conditions to achieve the desired outcomes. Burning is carried out in the cooler months so fire behaviour is mild, resulting in a patchy mosaic of burnt and unburnt vegetation. Over time, annual burning results in varying fuel ages across the landscape, reducing the intensity and severity of bushfires and facilitating bushfire suppression.

Prescribed burns include an assessment of the critical environmental, cultural and structural assets within burn areas. A key component of the process is stakeholder engagement, including Traditional Owners, ecologists, meteorologists and landholders to ensure all components are taken into consideration in the planning process.

A number of planned burns will be carried out within Cape Range National Park and surrounding Unallocated Crown Land. These burns aim to promote biodiversity, protect critical assets, the community and assist with suppression in the event of bushfires. Burn implementation will only occur under the appropriate weather conditions to achieve desired outcomes.

For more information regarding the prescribed burning planned for this season, please contact the Exmouth District Office on 9947 8000.





Top: Aerial view of Charles Knife bushfire. **Above** Parks and Wildlife Service staff mopping up in Shothole Canyon

Protecting native species along the Ningaloo Coast

Parks and Wildlife Service is continuing its ongoing commitment to reduce the impacts of feral cats and foxes on native wildlife within the Ningaloo Coast World Heritage Area. Over the coming months, 1080 baiting will be carried out on the North West Cape.

Led by Western Shield, the 1080 baiting program includes baiting areas within Cape Range National Park (CRNP), Exmouth Water Reserve, Defence Estate, sections of the Jurabi Coastal Park and Unallocated Crown land which is proposed as an extension to CRNP(see map).

Parks and Wildlife Service would like to remind pet owners to avoid the baited areas all year round.

If you would like to find out more about the 1080 baiting program please have a read of the links below <u>Western Shield | Department of Biodiversity, Conservation and</u> <u>Attractions (dbca.wa.gov.au)</u>

Interacting with whale sharks

Ningaloo Reef is one of only a few places in the world where these gentle giants appear regularly in relatively large numbers where they are easily accessible to observers.



When recreationally boating in Ningaloo Marine Park, please remember to:

- **Go slow for those below!** Reduce your speed and maintain a good lookout to reduce the chance of colliding with a whale shark and potentially causing serious harm to you, your boat and marine life.
- **Take care not to disturb whale sharks!** If planning on interacting with a whale shark remember to maintain 30 metres separation distance between the whale shark and your vessel. When in the water with a whale shark maintain 3 metres from the body and 4 metres from the tail.
- Know your zones When interacting with whale sharks, be courteous to others, know the rules, maintain appropriate distances and wait your turn.

Touching, disturbing, interfering with the natural movement of, or breaching separation distances for whale sharks in WA is prohibited under the Biodiversity Conservation Act 2016.

Department of Biodiversity Conservation and Attractions encourages everyone to report injured, entangled, stranded, or dead marine animals to the Exmouth Office (08) 9947 8000.



To receive a copy of this newsletter electronically please subscribe via dbca.wa.gov.au/news/newsletters Department of Biodiversity, Conservation and Attractions, Parks and Wildlife Service – Exmouth District20 Nimitz Street, Exmouth, WA, 6707 Phone: (08) 9947 8000 Email: exmouth@dbca.wa.gov.au

