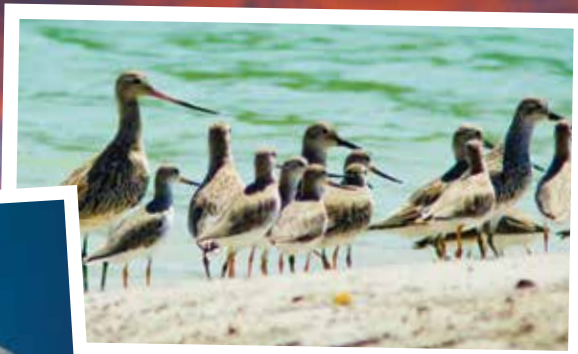


Eighty Mile Beach – a remarkable stretch of remote coastal country between Port Hedland and Broome – and its offshore waters provide food for a number of species, habitat for migratory birds and turtles, and is a significant place in the lives of the traditional owners of the area. And now, thanks to a partnership between Parks and Wildlife and the Karajarri, Nyangumarta and Ngarla people, it is providing employment for traditional rangers who are using their invaluable on-country knowledge to manage this special spot.

by Alan Byrne, Jesse Murdoch,
Leah Pearson, Matt Fossey
and Rhianna King



Eighty Mile

WHERE TRADITION



Beach

MEETS SCIENCE

Located in Western Australia's north-west, between Port Hedland and Broome, the beauty of Eighty Mile Beach Marine Park is significant on many levels. Its superb turquoise water and expansive blue sky contrasts against the rocky outcrops, mudflats and sandy beaches. Meanwhile every evening provides a different combination of hues and, when they're present, the silhouetted birds provide a point of reference to help you grasp the expanse of the scene before you. But the significance of this environment is much more than meets the eye.

For the Karajarri, Nyangumarta and Ngarla people – who have lived on and been connected to what is now the marine park and its plants, animals and spirits since the beginning of time – this area houses significant songlines and sites that are deeply embedded within their cultures. The area has a rich tapestry of family clans who speak for and care for specific areas of country. And while the groups speak for different areas, they share a strong and enduring responsibility to protect and manage the land and its sites, objects, plants and animals, as well as to preserve traditional knowledge and pass it onto younger generations through song, ceremonies and spending time on country. This connection is based on a simple but poignant premise: if you look after country, it will look after you. Today, thanks to a merging of traditional land management practices and contemporary science, via Indigenous Land Use Agreements and joint management arrangements, the future of this area is in good hands.

Left Traditional owners provide a wealth of insight into this spectacular country.
Photo – Colin Ingram/Parks and Wildlife

Opposite page
Left Dugongs are known to occur in the area.
Photo – Geoff Taylor/Lochman Transparencies

Centre The area is famed for its waterbirds, including terek sandpipers, great knots and bar-tailed godwits.
Photo – Cliff Winfield

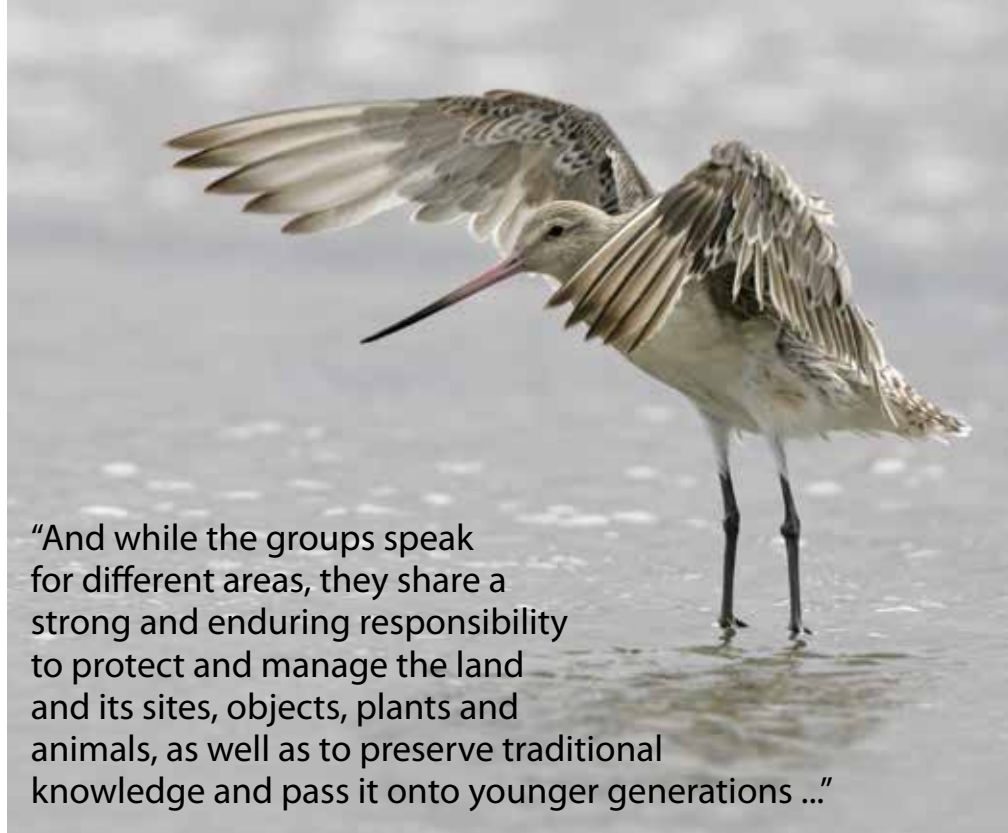
Right Flatback turtles nest at Eighty Mile Beach Marine Park during November and December.
Photo – Jiri Lochman

NATURAL ABUNDANCE

In 2013, a 200,000-hectare area of water and shoreline was afforded protection for conservation as Eighty Mile Beach Marine Park. The area's mudflats provide a rich source of food for the thousands of migratory shorebirds that flock to the area between August and November as well as its permanent populations. Ninety-seven species of waterbirds have been recorded in the area, including 42 that are listed under international migratory agreements – the highest number for any site in Australia. Birds come from as far away as Asia and Alaska as well as from other parts of Australia and New Zealand. This has seen the area listed as a Ramsar site and it is particularly significant given the declines in numbers of some migratory species while elsewhere. Surveys have revealed that the most common species are the great knot, bar-tailed godwit, red-necked stint, red knot and the greater sand plover.

Eighty Mile Beach is also a major nesting site for flatback turtles, which gather to nest at the beach from November to December before their hatchlings emerge from January to March. Green, hawksbill, loggerhead, olive ridley and leatherback turtles are also known to frequent the marine park.

The marine park is a feeding and breeding ground for dugongs – which use the protected shallow bays and mangrove channels – while some species of dolphins, including the Indo-Pacific bottlenose, Australian snubfin and the Australian humpback, are more inconspicuous users of the marine park. Shark species in the area include 'whaler' sharks – pigeye, nervous, graceful, blacktip, spinner, hardnose and lemon sharks – as well as hammerheads. Stingrays and shovelnose rays can be found in the area too. Four of the world's five sawfish species – dwarf, largetooth, green and narrow – occur here, which may represent one of the last relatively healthy sawfish populations in the world. Whales also pass through the area. And the marine park supports a diverse range of tropical fish species with more than



"And while the groups speak for different areas, they share a strong and enduring responsibility to protect and manage the land and its sites, objects, plants and animals, as well as to preserve traditional knowledge and pass it onto younger generations ..."

350 species recorded in waters that range in depth from five to 30 metres.

Underpinning the natural abundance of the area is the thriving populations of marine invertebrates which provide food for the birds, fish and turtles that visit the area. This abundance of marine life has sustained the traditional owners of the area for eons. Women would weave large nets using spinifex grass to catch large fish and dugong from the ocean or drag the nets through the shallow water at the mouths of creeks and rivers to catch mullet, barramundi, mangrove jacks and eels. While men would travel on rafts made from mangrove trunks to offshore reefs to catch fish, shellfish and octopus. They also used spears to hunt for fish and catch stingrays. At low tide, they were able to collect pearl shells and oyster meat on foot. Today, species such as prawns, crabs, squid, octopus, oysters, rock lobsters, sea cucumbers and hermit crabs are sought after by recreational and commercial fishers.

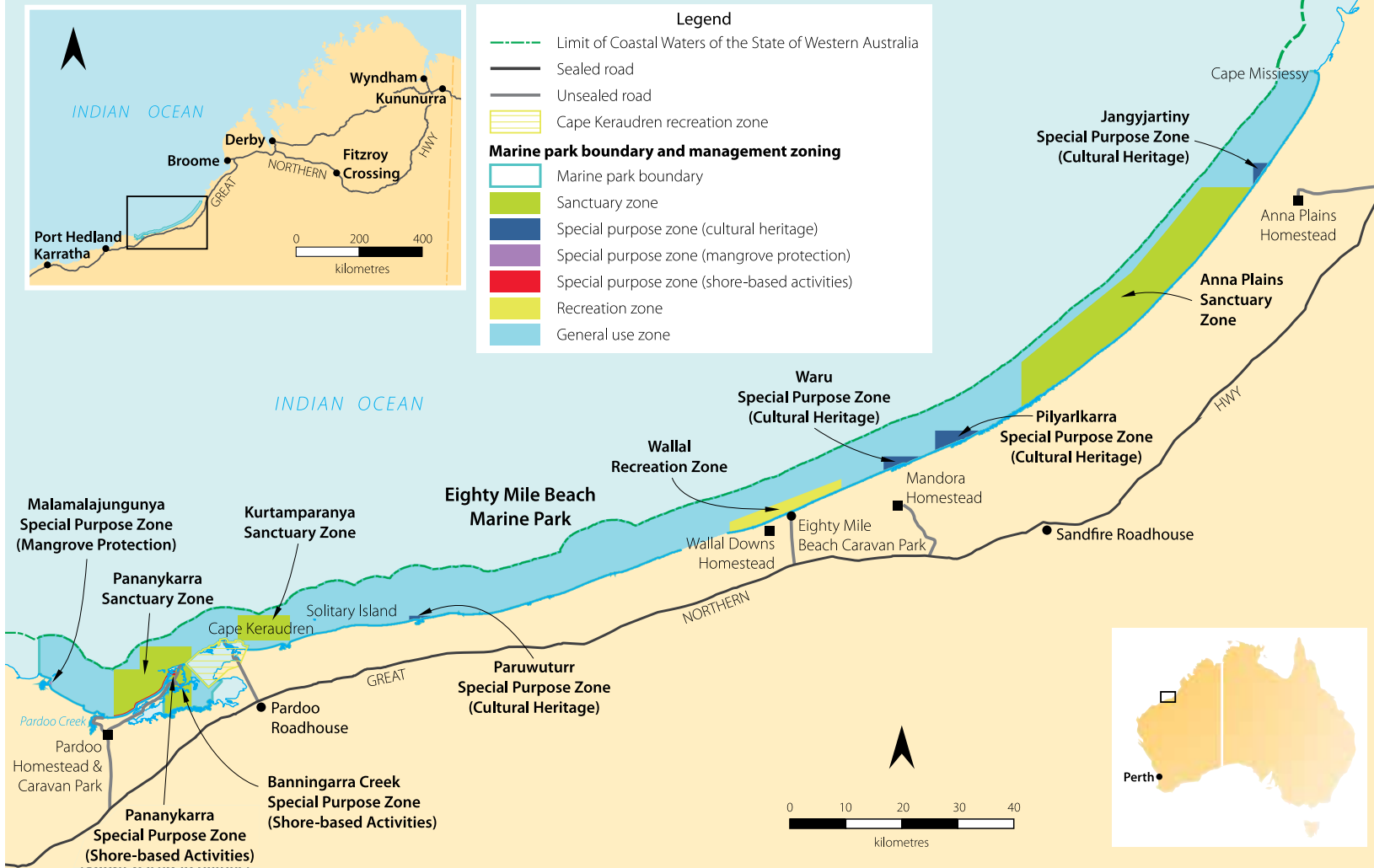
CULTURAL WEALTH

The State Government's *Kimberley Science and Conservation Strategy* was released in 2011 and committed to establishing a massive marine park network in the Kimberley, including Eighty Mile Beach Marine Park. The



strategy strongly acknowledges and respects the relationship the traditional owners have with the lands and waters of the region, and includes their valuable insight, skills and knowledge in the management of this special environment through joint management arrangements.

Over the last 10 years, Parks and Wildlife (and its predecessors) and traditional owners have worked collaboratively to develop meaningful relationships and manage these areas for the conservation of their cultural and natural values under joint management



Opposite page

Above left Bar-tailed godwit is one of the species that frequent the area.

Photo – Rob Drummond/Lochman Transparencies

Left Eighty Mile Beach Marine Park.

Photo – Dennis Sarson/Lochman Transparencies

Right Parks and Wildlife’s Eighty Mile Beach Marine Park Ngarla and Nyangumarta rangers (left to right) Augustine Badal, Jeffrey Brown, Nathan Hunter and Stephen Brown.

Photo – Miecha Bradshaw/Parks and Wildlife

arrangements. As part of this, a management plan for the area was released in 2014.

Recently, Parks and Wildlife staff and representatives from Greening Australia and BHP Billiton took part in a cultural awareness session with the Nyangumarta elders, who shared information about family trees, songlines, seasons, cultural sites, their stories and language. The group travelled to two culturally significant sites and talked about joint management, working together as family to protect the environment and discussing the way forward for land management in the area.

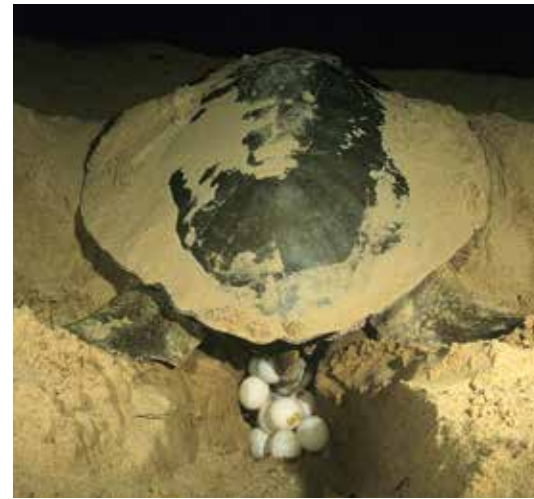




Above Stephen Brown watches a flatback turtle hatchling journey to the ocean.
Photo – Sara McAllister/Parks and Wildlife



Above centre Flatback turtles leave distinctive tracks to the water.



Above right A nesting female flatback turtle.
Photos – Jiri Lochman

Right The traditional rangers monitor turtles on Eighty Mile Beach Marine Park.
Photo – Sara McAllister//Parks and Wildlife



WORKING ON THE LAND

One of the most successful outcomes of this commitment has been the engagement of four traditional rangers who have joined Parks and Wildlife’s West Kimberley District Eighty Mile Beach Marine Park team as part of the department’s Mentored Aboriginal Training Employment Scheme. This scheme has been extremely successful in engaging Indigenous people in land management training across WA since it began in 2002, with 82 trainee staff completing one or more qualifications.

Augustine ‘Augie’ Badal and Nathan Hunter – Nyangumarta men – and Stephen Brown and Jeffrey Brown

Jnr – Ngarla men – started the program in 2015 and have brought a wealth of cultural knowledge and on-ground experience. They have already been involved in many aspects of management including flatback turtle monitoring where they attached satellite trackers to individual turtles, used cyber trackers to collect data from the turtle tracks and nests, and have taken visitors on night tours to watch the turtles nest while providing cultural and biological information about the species.

Augie and Nathan are from Bidyadanga, which is the largest remote Aboriginal community in WA. Bidyadanga has a population of about 750 people and is home to the Karajarri, Juwalinny, Mangala,

Nyungamarta and Yulpartja language groups. Since joining MATES, they have been involved in a biological survey of Mandora Marsh – a species-diverse and culturally significant wetland system inland of Eighty Mile Beach – where they assisted with animal surveys and water quality sampling. They also worked with elders and other traditional owners to share information about sites of cultural significance, including a sacred womens’ business site. Mandora Marsh will soon be protected by a new conservation park.

Meanwhile, Stephen and Jeffrey helped Bunuba Rangers with a freshwater crocodile survey at Windjana Gorge National Park, where they gained

“The past 10 years have delivered a range of insights into best practices for developing meaningful and successful partnerships with traditional owners on country.”



Above Augustine Badal with his boab nut artwork.

Right Nyangumarta elders sharing their knowledge of cultural sites within Eighty Mile Beach Marine Park.

Photos – Jesse Murdoch/Parks and Wildlife



experience in capturing the crocodiles and recording their length, weight and sex. For Stephen, he hopes his job will help him hand down knowledge and experience to the next generation and is optimistic that his position will open up other employment opportunities within his community when he eventually moves on.

The rangers are also completing units towards their Certificate II in Conservation and Land Management and have developed skills in welding, using power tools, fire-fighting practices, computers and radio communications. They have undertaken a range of training and workshops including bush survival, four-wheel driving and quad biking and a irukandji sting prevention and treatment workshop. Karajarri Rangers who are employed under the Commonwealth Indigenous Protected Area (IPA) program have been engaged on a fee-for-service arrangement to conduct similar conservation works, such as fencing of parts of the Eighty Mile Beach coastline, assisting with migratory bird surveys, and designing and installing interpretive signs that carry both cultural and scientific messages. This fee-for-service arrangement will remain given the strength of the existing IPA ranger program.

ROOM TO MOVE

To date, the engagement of the traditional owners and ultimately the rangers has proved a resounding success. The past 10 years have delivered a range of insights into best practices for developing meaningful and successful partnerships with traditional owners on country. In particular, Parks and Wildlife has worked to recognise the traditional owners as more than just stakeholders, but as co-managers who are strongly vested in all decisions and activities that affect their land. And significant time and effort has been invested in the interpersonal relationships that exist between Parks and Wildlife staff and the Ngarla, Nyangumarta and Karajarri people. Much of this relationship building has occurred on country, where the traditional owners often feel most comfortable to share knowledge and experiences. Joint management is based on the premise that the merging of traditional ecological knowledge and modern-day science will offer the best possible protection to this beautiful and spectacular landscape and all that inhabits it, while providing opportunities for traditional owners to share their ancient and proven practices.

Scan here to watch a video about the traditional owners and how to enjoy a turtle nesting experience at Eighty Mile Beach.

Scan this QR code or visit Parks and Wildlife's 'LANDSCOPE' playlist on YouTube.



Alan Byrne is the Parks and Wildlife West Kimberley District Manager. He can be contacted on (08) 9195 5500 or by email (alan.byrne@dpaw.wa.gov.au).

Jesse Murdoch is a Parks and Wildlife marine interpretation officer. She can be contacted on (08) 9195 5574 or by email (jesse.murdoch@dpaw.wa.gov.au).

Leah Pearson is a Parks and Wildlife project officer based in the West Kimberley District. She can be contacted on (08) 9195 5500 or by email (leah.pearson@dpaw.wa.gov.au).

Matt Fossey is a Parks and Wildlife marine park coordinator. He can be contacted on (08) 9219 9119 or by email (matt.fossey@dpaw.wa.gov.au).

Rhianna King is a LANDSCOPE editor. She can be contacted on (08) 9219 9903 or by email (rhianna.king@dpaw.wa.gov.au).