Shorebird research at Eighty Mile Beach Marine Park

Eighty Mile Beach and Roebuck Bay support a high diversity and abundance of shorebirds. They are considered the most important sites for stop over and feeding by migratory shorebirds in Australia. The shorebirds of Eighty Mile Beach have national and international significance, and are recognised as a critical component of the Ramsar listed site.

Each year, shorebird surveys are conducted at both Eighty Mile Beach and Roebuck Bay by the Australasian Wader Studies Group, a special interest group of BirdLife Australia. This year the annual Shorebird and Tern Banding Expedition began in February and concluded in March – the period when waders are most abundant at Eighty Mile Beach and Roebuck Bay marine parks. The specific objectives of this year’s surveys were to estimate the relative breeding success of waders (by measuring the proportion of juveniles in catches) and to gather information about species which are less frequently observed in north-west Australia (e.g. black-tailed godwit, whimbrel, grey plover, etc.). This year 2,600 birds were captured and released and 41 transmitters were attached to birds by harness to monitor their migration. Overall the preliminary data showed it was a poor breeding season during the northern hemisphere summer of 2016. The stand out exception was the curlew sandpiper that had 40 percent juveniles in the sample that the team captured, a remarkable percentage considering this is after the birds have undertaken their first ever southward migration back to their non-breeding sites in East Asia and the Arctic.

Quick Facts

- Australian snubfin dolphins in the Kimberley appear to be comprised of at least three genetic populations
- The North Kimberley Marine Park is the largest marine park in Western Australia and the second largest marine park in Australia

Introducing Anthony Richardson

Yawuru Nagulagun / Roebuck Bay Marine Park Ranger

It’s an exciting time for the Yawuru / Nagulagun Roebuck Bay Marine Park as we begin the operational processes to set up the park, including research and monitoring programs and education and park patrols.

We have recently concluded a very competitive recruitment process for the first Indigenous marine ranger for the park and welcome Anthony Richardson to the role. Anthony, also affectionately known as ‘Richo’ or ‘Bundu’, has taken on many roles at Parks and Wildlife over his 15 years working for the department.

After starting as an Indigenous trainee in 2002 he has experienced a variety of work as Nature conservation officer, a ranger team leader, an operations officer, including implementing many capital works projects, and has been heavily involved in marine research and monitoring, skippersing the department vessel Jangabarri for many years. Anthony is a proud Yawuru man and brings a wealth of experience in western and traditional management of the land and sea. We look forward to seeing him out on patrol in the marine park in 2017.
New marine parks announced

The Lalang-garram / Horizontal Falls and North Lalang-garram marine parks were established on 25 October 2016. These marine parks are jointly managed by Parks and Wildlife and Dambimangari Aboriginal Corporation to protect the vast, pristine, remote coastline and unique marine ecosystems of Dambimangari sea country.

Lalang-garram / Horizontal Falls Marine Park includes eight sanctuary zones, three special purpose zones and one general use zone, while the North Lalang-garram Marine Park is zoned as general use.

These marine parks will generate new, high quality, sustainable tourism and Indigenous employment opportunities while providing protection for many natural and cultural assets, including turtles, coral reefs, dugongs, and whales, as well as cultural artefacts such stone arrangements and fish traps.

Parks and Wildlife, Dambimangari Rangers and the Department of Fisheries will be carrying out regular patrols conducting a range of research and monitoring, compliance, education and interpretation and visitor risk management activities. The Parks and Wildlife and Dambimangari patrol vessel Worndoom will soon be recommencing the patrol season for 2017.

North Kimberley Marine Park

The North Kimberley Marine Park was officially gazetted on 16 December, 2016. The park is the largest marine park in Western Australia and the second-largest marine park in Australia.

North Kimberley Marine Park will be partly managed with Balanggarra traditional owners to preserve, foster, advance and monitor the cultural and natural values of the park. In addition to this, the park is also there to ensure that the social values (recreational, tourism and community values) will continue sustainably.

The marine park is home to coral reefs of great abundance and diversity. Initial research efforts will focus on monitoring coral reefs for signs of bleaching. The ongoing work will include monitoring turtle nesting sites, dugong populations, and assess the health of mangroves, saltmarshes and seagrass meadows.

Parks and Wildlife in collaboration with the Department of Fisheries will also initiate an education program for the public, tourism operators and conduct school visits.
Vessel owners – help stop the spread of marine pests!

All vessels travelling to, from and within WA waters, regardless of their size or frequency of visits could pose a risk to WA’s aquatic environment.

To help keep WA waters free of marine pests, vessel owners including tour operators are urged to follow the Department of Fisheries CLEAN vessel policy. These simple steps will assist vessel owners reduce their risk of spreading marine pests and will also provide a number of benefits including increased vessel performance and speed, lower fuel consumption and reduced maintenance costs.

CHECK: that your vessel is clean by regularly inspecting the hull and niche areas like internal seawater systems. Also inspect and clean topside gear – rinse it with fresh water and allow to air dry. (Most small pests die in about 24 hours.)

LEVELS of biofouling on your vessel should be kept to a minimum (slime layer only), particularly on unpointed areas. All seawater should also be treated, pumped out before travel, or in deep water far away from land.

ENVIRONMENTALLY-FRIENDLY methods should be used to keep the hull clean – keep it out of the water, tarp it when not in use or clean it at a slipway, dry dock or on land. Don’t clean the hull in the water on the beach or at the boat ramp where pests and contaminants can get back into the water, without first checking with the relevant authorities.

ANTIFOULING paint should be renewed regularly in accordance with the manufacturer’s directions and should be suitable for your vessel’s intended activity.

NEVER: travel to from and within Western Australia without first taking these steps, and keeping records of them and your voyage history in case of queries. If you are travelling within the State, it is also recommended you do this.

Once well-established, marine pests are extremely costly and almost impossible to eradicate. Therefore, prevention of arrival and early detection is essential and provides the best chance of a timely response and successful eradication.

If you think you have found or seen a marine pest, please contact our FishWatch 24-hour hotline on 1800 815 507, or report it using the WA PestWatch app.

For more information on marine pests and good vessel maintenance visit: www.fish.wa.gov.au/biosecurity

Fisheries staff member joins the team

Jennifer Bennett has been appointed to the position of community and education officer, Kimberley Marine Parks.

Jennifer has worked for the Department of Fisheries since 2014, previously working as a community and education officer for the Ngari Capes Marine Park, in the Capes region of the State’s south-west. Jennifer currently works as a community education officer for the Department and will continue in this position part-time, alongside her Kimberley role.

Jennifer is passionate about the marine environment and is an avid diver and beach enthusiast. Jennifer first visited the Kimberley in 2005 and has returned several times since to spend time with her northern-based friends and explore this spectacular and enchanting part of the world.

Jennifer has previously worked as an activities officer on Rottnest Island, as a camp leader at Perth Zoo, a deck-hand on a commercial ferry and as a primary school teacher in Western Australia and the United Kingdom.

She looks forward to being involved in the project and meeting with staff and stakeholders in the near future.
Estuarine crocodile populations continue to grow in the Prince Regent river system

Population growth rates of estuarine crocodiles in the West Kimberley region do not appear to be slowing, with steady increases in total numbers observed, along with a more gradual increase in the number of large crocodiles (>3m).

There has been a 259% percent increase in non-hatchling crocodile numbers since the last survey of the Prince Regent river system in 1986, some 30 years ago.

Lead researcher for the Western Australian Marine Science Institution’s (WAMSI) saltwater crocodile project, Dr Andy Halford (Parks and Wildlife), said: “Comparisons with established crocodile population patterns in the NT’s Adelaide River indicate that the West Kimberley crocodile populations are still recovering from the large-scale hunting that prevailed pre 1970.”

“We counted a total of five crocodiles >3m in length in comparison with 63 counted in the Adelaide River,” Dr Halford said.

“The interesting difference is that, while a lot of crocodiles between 1.5-2m long are usually eaten or killed by larger crocodiles or forced to move into new territory, the percentage of young adults entering the West Kimberley system is up to three times that seen in the NT,” he explained.

“What this study has told us is that while crocodile populations are healthy and recovering well, exactly how the future recovery will pan out is unclear. “What we do know is that there will be increased interactions between crocodiles and humans, and in order to provide advice on managing this, we need to learn more about the amount of available nesting habitat throughout the region, as well as updating our surveys of other river systems,” Dr Halford said.

Dr Halford’s full presentation is available at www.wamsi.org.au/research-site/saltwater-crocodiles.

Scientists learn more about Kimberley dolphin populations

Australian snubfin dolphins in the Kimberley appear to be comprised of at least three genetic populations that require careful management, according to new research.

A Western Australian Marine Science Institution, Kimberley Marine Research Program project involves surveying local populations, collecting genetic samples, and developing new tools to help monitor these elusive species.

The research team from Murdoch and Curtin universities found that both snubfin and humpback dolphins occurred at all sites surveyed, although in varying numbers.

Small local populations of snubfins were observed at Cone Bay and the Prince Regent River.

Genetic analyses, led by Murdoch University’s Dr Alex Brown, showed that not all snubfin dolphins in the Kimberley could be considered the same population.

Evidence suggests that there is very limited movement of snubfin dolphins between Roebuck Bay and King Sound, and that animals sampled further north and east may represent a third genetic population.

“It’s important for decision makers to recognise this genetic structure in order to minimise any threats to small, isolated, local populations," Dr Brown said.

The research team collected data alongside Yawuru, Bardi-Jawi, Dambimangari and Balanggara traditional owners, as well as regional Parks and Wildlife staff.

The full presentation is available on the WAMSI dolphin project page: www.wamsi.org.au/research-site/dolphins.