



Department of Biodiversity,
Conservation and Attractions



WIRRUWANA NEWS

UPDATES FROM DIRK HARTOG ISLAND NATIONAL PARK

SPRING 2021

The Dirk Hartog Island National Park *Return to 1616* Ecological Restoration Project has gone from strength to strength this year with the successful reintroduction of three native species and significant work underway to repopulate the island with another three species. Time to celebrate.



Shark Bay mouse – hiding in plain sight

By Saul Cowen

Above Shark Bay mouse or 'sharkie'. Photo – Wayne Lawler/Australian Wildlife Conservancy

The Shark Bay mouse previously occurred on Dirk Hartog Island and in April this year, this species became the fifth to be returned to the national park as part of ongoing restoration efforts by the Department of Biodiversity, Conservation and Attractions (DBCA).

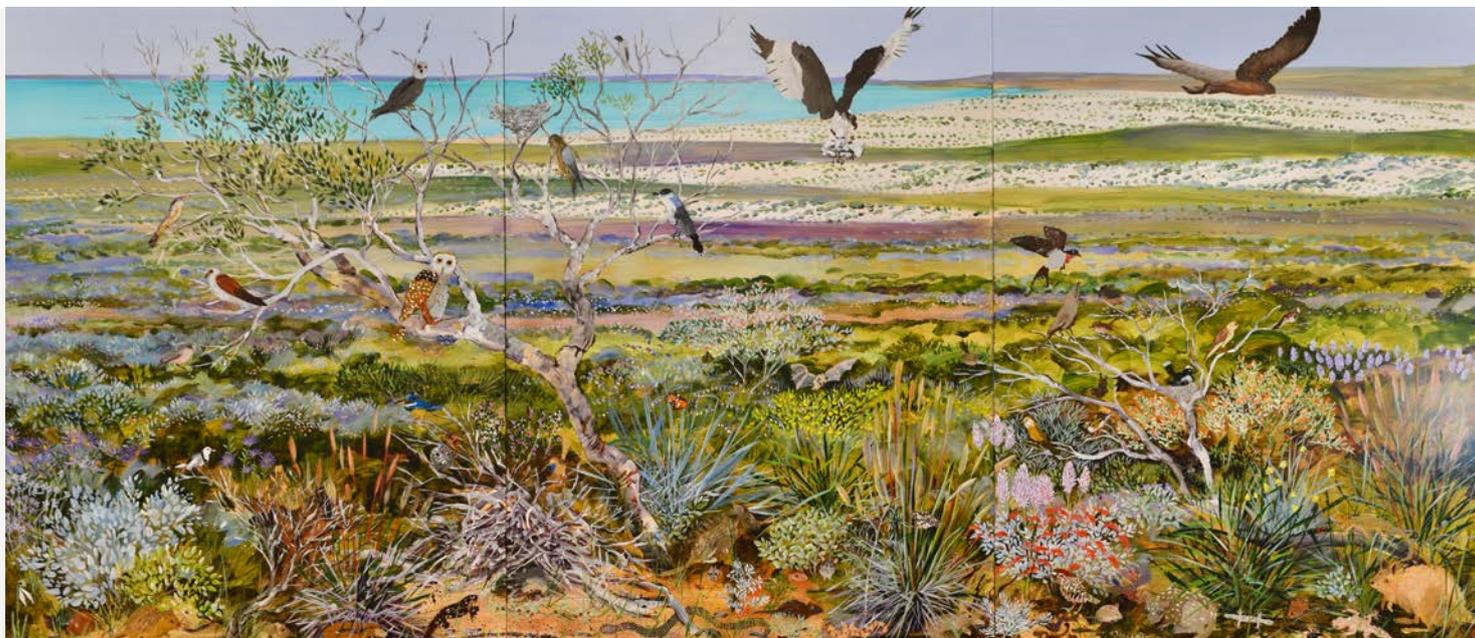
Although they may look like many other native Australian rodents, Shark Bay mice (*Pseudomys fieldi*) or 'sharkies' are rarely encountered and they have a very restricted distribution. After a massive population decline following European colonisation, they were only saved by the survival of a population on Bernier Island. Although not all translocation efforts have been successful, new populations have been established on Faure Island and Northwest Island in the Montebello Islands. But just recently, their conservation success story got a bit more special!

In a surprising twist to their restoration tale, scientists in Melbourne have made a fascinating discovery. Genetic comparison of Australian native rodents earlier this year

showed that sharkies and the extinct Gould's mouse (*Pseudomys gouldii*) are in fact the same species! Gould's mouse has been 'hiding in plain sight' all this time and masquerading as the Shark Bay mouse. Their surprising extinction 'resurrection' means that 'sharkies' just got a whole lot more important.

Sharkies are well known to use coastal spinifex as core habitat on both Bernier and Northwest islands and Dirk Hartog Island National Park has just the right home for them at Tetradon Loop where 80 individuals were translocated from Northwest Island in April. Dense clumps of coastal spinifex here offer them all the comforts of home to help them settle into their new island abode.

Monitor trapping in September caught 33 individuals, of which 21 were new island-born mice, some of whom were already pregnant themselves! Hopefully this is good sign that Dirk Hartog Island National Park will soon host a valuable population of this special little rodent, making its future a little more certain.



Celebrating the return of native animals to Dirk Hartog Island National Park

The aim of the *Return to 1616* project to re-establish 13 native animal species to Dirk Hartog Island National Park is slowly but surely being realised. The project's success thus far is no happy accident and comes as a result of the hard work of so many scientists, DBCA staff, volunteers and the Denham Community.

With the successful establishment of populations of three threatened fauna species and work currently under way to repopulate the island with another three species, the "halfway" mark has been reached. This calls for a celebration and this spring, that took the form of the Biodiversity Festival 2021. The festival was held over several months, included lots of fun activities for all of the Denham Community and culminated in the "Biodiversity of the Bay" art exhibition held at the Shark Bay World Heritage and Discovery Centre.

The festival began in May with a photographic competition to commemorate the 30th anniversary of Shark Bay's World Heritage Area listing and to celebrate the contribution made by the *Return to 1616* project to the region's biodiversity. Many beautiful photographs were entered by the Denham community making a colourful addition to the exhibition and a hard job of for the judges to determine the winning entries.

Following hard on the heels of the photo competition, artist Angela Rossen was commissioned to provide art workshops for the Denham community and Shark Bay School. These workshops focussed on the *Return to 1616* project's flora and fauna and lots of fun was had by all participants discovering hidden talents to create their very own biodiversity artworks.

Above *Return to 1616* animals and plants of Dirk Hartog Island National Park. A biodiversity artwork created by the students at the Shark Bay School with the artist Angela Rossen. Photo – Angela Rossen

Above left MC Sally Capewell presenting first prize for the Celebrate Shark Bay photo competition. Photo – Lesley Meinema

Left Khayla Wordsworth at a community workshop with her painting of a boodie. Photo – Lesley Meinema





Above left Shark Bay Arts Council members Celia Elisegaray and Karen Gidley creating their own biodiversity masterpieces.

Above right Shark Bay School students worked hard to add their own art to the background painting of the national park. Photo – Angela Rossen

Shark Bay School students worked on their own individual artwork pieces as well as producing the ‘piece de resistance’ of the art exhibition, a magnificent tryptic artwork. This was painted in three pieces and depicted the threatened animals being returned to Dirk Hartog Island National Park as well as other island flora and fauna.

All of the artwork and photographs were curated into a five-week-long “Biodiversity of the Bay” art exhibition that opened at the Shark Bay Discovery Centre Rose de Freycinet Gallery on 3 September to a packed crowd.

The evening kicked off with a Welcome to Country and fabulous Dirk Hartog Island song provided by Malgana Elder Howard Cock who generously shared his life experiences on the island. Sally Capewell representing the Shark Bay Arts Council was the official Master of Ceremonies (MC) for the evening and Executive Director of Biodiversity and Conservation Science Dr Margaret Byrne from DBCA officially opened the exhibition. Denham singers and professional violinist Katie McKay provided the entertainment for an appreciative audience.



Top The gallery before the exhibition opening. Photo – Lesley Meinema

Below The Rose de Freycinet gallery 15 minutes after opening. Photo – Angela Rossen

Inset Dr Margaret Byrne (DBCA) officially opened the exhibition. Photo – Lesley Meinema

As with projects of this size, there are so many organisations and individuals to thank.

The Biodiversity Festival 2021 was organised by the Department of Biodiversity Conservation and Attractions and generously supported by Shark Bay Arts Council, Denham community members, Shire of Shark Bay, Shark Bay Aviation, Dirk Hartog Island Eco Lodge, Ocean Park Aquarium, Shark Bay School, Angela Rossen, Shark Bay World Heritage Area Advisory Committee, Shark Bay Community Resource Centre, Perth Zoo, Shark Bay World Heritage Discovery Centre and Gorgon Barrow Island Net Conservation Benefits Fund.



Dibbler mother and her eight pouch young. Photos – Jason McDonnell



Early Christmas present

By Saul Cowen

The reintroduction of diberners to Dirk Hartog Island National Park began in 2019 and each year, small numbers of animals bred as part of Perth Zoo's Native Species Breeding Program have been released onto the island. A further release of 36 diberners this October brought total number of diberners released over the past three years to 93. With low initial numbers, finding them again to monitor their progress has been a challenge on Western Australia's largest island. Until their numbers start to build up, they are likely to remain a tricky species to trap.

In the meantime however, there is some early indication that diberners are doing well, and Christmas came early this year for the *Return to 1616* fauna team when a female dibbler was caught during routine trapping. Even more exciting was the discovery of a full complement of eight tiny joeys in her pouch!

Despite being the second smallest of her group when released in October 2020, having so many pouch young shows this hasn't hindered her ability to adapt to the challenges of life in the wild. While dibbler mums have eight teats and can rear eight babies, in reality they often rear fewer than this. Finding so many young in this female dibbler's pouch is a good indication of her health and a promising sign of things to come. If her offspring survive, they will become the first Wirruwana-born diberners to make the island their home for perhaps hundreds of years.

Contributors: *Return to 1616* Research Scientist Dr Saul Cowen, Regional Interpretation Officer Wendy Payne. Editors Dr Karl Brennan, Wendy Payne.

Contributions to this biannual newsletter from outside the *Return to 1616* project are welcome.

The *Return to 1616* project is funded by the Gorgon Barrow Island Net Conservation Benefits Fund.



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