

WIRRUWANA NEWS

UPDATES FROM DIRK HARTOG ISLAND NATIONAL PARK

SUMMER 2022

This year has been a truly amazing year for the *Return to 1616* Ecological Restoration Project. Western grasswrens “flew” to the island, greater stick-nest rats made an epic journey from South Australia and Shark Bay mice made a not so epic journey from nearby Bernier Island to “top up” the genetic diversity of existing pioneer populations. Best news of all? Many of the native animals found during monitoring are true ‘locals’. Born on Dirk Hartog Island!

A very special welcome

In mid-October this year, there was a very special event in Dirk Hartog Island National Park – the meeting of hearts and minds to welcome home dibblers. The Minister for Environment, the Hon Reece Whitby MLA, travelled to the island for the occasion and joined Malgana Elders Howard Cock and Bobby Dorey to take part in one of the last releases of dibblers on Wirruwana. Bred at Perth Zoo, the numbers of dibblers released on the island have gradually climbed over the past three years, aiming for a population size that is large enough to be self-sustaining in the future.

As the welcoming party congregated at the prearranged dabbler release site on the beach at Herald Bay, they were surprised and delighted to be met by a group of Dirk Hartog Island ‘locals’ with their very own welcoming committee. The Minister, Malgana Elders, fauna scientists and local Department of Biodiversity, Conservation and Attractions (DBCA) staff were greeted by a group of dugongs, rays and a small school of nervous sharks lolling about in the water scant metres off the beach. The dugongs remained for some time and appeared keen to join the event and add their own personal welcome to the dibblers.

Bobby Dorey and Howard Cock were on hand to provide a formal Welcome to Country to both human and dabbler



participants prior to the dibblers being released on dusk into temporary shelters that allow them to acclimate to the island before being allowed to roam free after a few weeks.

On his first trip to Dirk Hartog Island National Park, Minister Whitby was impressed with the progress of the ecological restoration project. “It’s wonderful to see how Western Australia’s largest island is flourishing after the removal of feral cats, goats and sheep. This is a project of great international importance, made possible by the passion of many dedicated individuals who’ve come together from such a wide range of disciplines to make it happen.”

Left Malgana Elder Bobby Dorey and Minister Whitby. **Above** Scientist releasing a dabbler from Perth Zoo. Photos – Shem Bisluk/DBCA **Below** Research scientist Dr Leanne van der Weyde with Malgana Elders Bobby Dorey and Howard Cock. Photo – Wendy Payne/DBCA





Reintroduction roll-call

Above left Shark Bay bandicoots are breeding well on the island. Photo – Ellis **Above right** Dirk Hartog Island National Park welcomed 50 Shark Bay mice this year from Bernier Island. Photo – DBCA

Well it's only six years since reintroductions began and things are getting exciting! Exceptional winter rainfall the last two years has promoted good plant regeneration, providing good food and shelter for our intrepid native animal 'trailblazers' and you might well be wondering how they are faring! So, let's do a 'stock-take' to see how the island is progressing along its reintroduction 'road to recovery'.

Rufous hare-wallaby translocations were completed in 2019 and they are now found over a large portion of the island from Cape Ransonnet at the southern tip to Turtle Bay at the island's northern tip. Banded hare-wallaby reintroductions were completed in 2018 and they continue to steadily expand their range which currently covers much of the lower half of the island north to Herald Bay.

Shark Bay bandicoots released between 2019 and 2020 are breeding like - well, breeding like bandicoots. They can be found almost everywhere from Notch Point in the south, to Withnell Point. Rapidly heading north, they appear to be hell bent on covering the island in their tell-tale diggings, droppings and footprints, and will likely reach Turtle Bay in the near future.

Greater stick-nest rats and Shark Bay mice both began their reintroduction journey to the island last year and those first island populations have now been given a genetic diversity 'booster shot' this year with 'top-up' translocations from other island sources.

This now completes the reintroduction for these two species, and Shark Bay mice appear to be making an enthusiastic job of re-establishing themselves on the island. 'Stickies' continue to be elusive, dodging the more standard monitoring methods, however newly introduced technology allows them to be 'scanned' like a food item at a supermarket checkout as they enter and leave their nest without them even knowing. This new monitoring technique, together with photographs collected from remote cameras, is showing promising signs of success for this species.

Dibbler reintroductions have been ongoing since 2019 and as the numbers of dibblers bred at Perth Zoo and released on the island climb higher, their translocations are likely to end in the near future. And last but not most certainly not least, western grasswren translocations were carried out in October this year in a highly organised translocation effort that went like clockwork, completing the seventh of the planned 13 native animal species to be released on the island. Stay tuned to hear their journey in the next Wirruwana News in early 2023.

Jet setting stickies

Once found right across Australia from Shark Bay to New South Wales, greater stick-nest rats (or 'stickies') are now extinct on the mainland, persisting only in a few fenced enclosures and on several feral animal free islands. To even up the conservation odds for this threatened species, they were returned to Dirk Hartog Island National Park in May last year, making the journey from the nearby Salutation Island in Shark Bay.

Right A total of 60 greater stick-nest rats flew from South Australia to Dirk Hartog Island National Park in May this year. Photo – Steve Reynolds/DBCA



In May this year, the *Return to 1616* fauna team took translocations to a new level in an ambitious leap forward to boost the genetic diversity of this new population of guinea-pig sized native rodents.

Backed by many months of planning and logistical lubrication, our intrepid band of fauna scientists and volunteers headed interstate to the remote East and West Franklin Islands off South Australia. Here they joined forces with PhD student Kelly Williams from La Trobe University and staff from the South Australian Department for Environment and Water, including the legendary greater stick-nest rat expert and award-winning ecologist Peter Copley.

The mission? To successfully capture up to 60 individuals from the world's only remaining naturally occurring population of stickies on Franklin Islands, and relocate them to Dirk Hartog Island (Wirruwana). This fresh injection of DNA will genetically reinforce the population, increasing their chance of survival in the future.

The two islands are home to the most genetically diverse population of stickies remaining on Earth and they share the dense, low-lying shrubby habitat with southern brown bandicoots and a notably large population of tiger snakes! A conservation jewel in the Nuyts Archipelago Wilderness Area, the islands are also used by Australian sea lions and various bird species including Cape Barren geese, little penguins, and short-tailed shearwaters whose deep and easily collapsible burrows pepper the terrain like a minefield. Public access to these islands is strictly prohibited to protect these sensitive species and their habitat, and the stickie collection trip was timed to ensure shearwater burrows were unoccupied.

With the weather only allowing a short window of opportunity, a helicopter delivered the team and their equipment to the islands where they established a beach camp along a sheltered cove.

Using thermal imaging, night spotting scopes and spotlighting equipment, they quickly established that a healthy population of stickies was present. The mission could go ahead as planned!

On dusk over the next two evenings, the eager team collected their catching nets and ascended the coastal slopes to reach their quarry. The team braved steep terrain, dense bushes, collapsing shearwater burrows and tiger snakes each night to capture and select their intended quarry of 30 "keepers" by midnight. Individuals were selected based upon size, sex, reproductive status, and condition, before being gently carried back down the slope to the beach camp. A grand total of 24 females and 36 males were collected, and after receiving a microchip to allow future identification, DNA samples were taken, and their weight and size recorded before being placed into individual wooden transport boxes. These were custom-made by inmates at the Albany Regional Prison Cabinet Shop and lined with a small amount of luxurious pet bedding material for extra comfort. In-flight catering was provided with a mix of freshly sliced apple, carrot, sweet potato and sunflower seeds before their dawn helicopter flight to Ceduna. From here, they boarded a chartered plane heading up, up and away, bound for Monkey Mia Airport in Western Australia. A final helicopter flight to Dirk Hartog Island concluded their whopping 2,160km journey in only nine hours!

Our travellers were kept in airconditioned comfort on arrival while they underwent final health checks. With their journey at an end, their travelling boxes were opened and placed inside new homes or 'proto-nests' (preconstructed piles of intertwined sticks) at a nearby coastal release site. While all of these new island inhabitants will have to face perils posed by native birds of prey, snakes and goannas, they are free to establish a new colony safe from feral cats.

After SO much effort by SO many scientists, conservation staff and volunteers who have come together to add one more "piece of the puzzle" and progress one of the world's most important conservation projects. It's good to know how you can help.

As this small population struggles to establish a new community, take care when you visit Wirruwana and observe the following advice on how to keep them safe.



Above Nothing but the best for our new greater stick-nest rats with beach side real estate on Dirk Hartog Island National Park where they were released in their transport boxes. Photo – Wendy Payne/DBCA



Above Brooke Richards and John Angus set forth for a night's "catching". Photo – Steve Reynolds/DBCA

You can help!

Two years of above-average winter rainfall has provided good food and shelter for the fledgling, new native animal populations that have been returned to Dirk Hartog Island National Park, and they appear to be doing well. It's early days though, and populations of these animals are still small and fragile. Losing even one animal can have a detrimental effect.

Earlier this year, dog footprints were found close to the release site of greater stick-nest rats! After all the hard work that has gone into returning native animals to the island, this is something that no scientist ever wants to see. Whilst it's generally well understood that dogs are not permitted in national parks, it's particularly important on Dirk Hartog Island. It only takes a few seconds for a dog to have a serious impact on a small, newly introduced population of precious, threatened native animals.

Giving each individual animal as much protection as possible can have a really positive effect and it's good to know that we can all 'do our bit' and help protect this internationally significant wildlife restoration project. Helping these fragile populations is easy. Watch the island protection video and

download the island protection brochure before travelling to the island to help plan your trip before leaving home.

Did you know that there are no kangaroos on the island? Any 'kangaroo-like' animal that you see is a threatened hare-wallaby species that is extinct on the Australian mainland apart from a few small, fenced populations. It can be a surprise for visitors to Dirk Hartog Island to learn that native animals often use vehicle tracks to get around. You can help these precious native animals on their road to recovery by avoiding driving from dusk to dawn when they are active to keep them safe.

From little things, big things grow. Every small protection measure that visitors take while on the island adds up to a bright future for these vulnerable Australians.

Watch the island protection video and read the island protection brochure before travelling to the island to help plan your trip before leaving home.

Scan these codes to:



Above Denham DBCA staff (left to right) Dale Fitzgerald, Tariq McDonald and research scientist Kelly Rayner worked hard to install animal safety reminders across the island. Photo – Fiona Knox/DBCA

watch the island protection video



read the island protection brochure



Above left Dog footprints found on the island. Photo – Kelly Rayner/DBCA
Right Leave your pets at home when visiting the island by boat.

Contributors: *Return to 1616* Research Scientists Dr Colleen Sims and Technical Officer Sean Garretson, Dr Saul Cowan, Regional Interpretation Officer Wendy Payne.

Editors: Dr Karl Brennan, Wendy Payne.

Contributions to this biannual newsletter are very welcome. Email wendy.payne@dbca.wa.gov.au

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



Scan this QR code to keep up to date with what's happening with the Dirk Hartog Island National Park Ecological Restoration Project – *Return to 1616*