WIRRUWANA NEWS UPDATES FROM DIRK HARTOG ISLAND SUMMER 2018

Welcome to the first edition of Wirruwana News. Wirruwana is the Malgana Aboriginal name for Dirk Hartog Island, a place that is once again becoming home to a suite of native animals through the *Return to 1616* project.

Although this newsletter sharing what's happening on Dirk Hartog Island is under the *Return to 1616* project, it also looks at other activities on the island and contributions to this biannual newsletter outside the project are both welcome and appreciated.

Making history

A small group of hushed onlookers witnessed an historic event on Dirk Hartog Island on 29 August 2017 - the first release of native animals onto the island under the *Return to 1616* project.



Twenty-four hare-wallabies were translocated from Bernier and Dorre Islands Nature Reserve to Dirk Hartog Island National Park. After taking a moment to get their bearings, the wallabies slowly ventured into their new surroundings, some snacking on the now lush vegetation along the way.



DBCA officers Kelly Rayner and Keith Morris release the first banded hare-wallabies (*Lagostrophus faciatus*) onto Dirk Hartog Island.

The acacia and spinifex sandplains on Dirk Hartog Island are now lush with vegetation because there are no longer sheep and goats on the island. Nearly all of the sheep were removed in the lead up to the island becoming a national park in 2009. The remaining sheep were removed along with goats and cats during the first stage of the Return to 1616 project.



DIRK HARTOG ISLAND RETURN TO 1616

The Dirk Hartog Island National Park Ecological Restoration Project, *Return to 1616*, aims to restore the island's ecology to how Dirk Hartog would have seen it in 1616.

Dirk Hartog was the first European to land on Australian soil and leave evidence of doing so. On 25 October 1616 he left a pewter plate with details of his journey to Indonesia. Since his visit, the island has seen a succession of seafarers and enterprises, including the devastating occupation of thousands of sheep and goats.

Feral cats were also introduced and between the loss of habitat and onslaught of new predators, at least 10 native species on the island became extinct.

The Return to 1616 project has removed goats and last of the sheep and believes there are no cats left on Dirk Hartog Island. This has allowed a small translocation trial in August 2017 to refine the transport, release and monitoring protocols for future, large-scale translocations.

Contributors: DBCA officers Dr Saul Cowen, Research Scientist; Kelly Rayner, Technical Officer; Khayla Wordsworth, Reserves Officer, and volunteers Claudia Buters and Andreas Stricker. Photos: Keith Morris, Saul Cowen, Claudia Buters, Richard Manning, Sharon Drabsch. Editor: Susan Pedersen.

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

the island recently. During patrols

the rangers have been working their way through jobs ranging from sign installations and risk management inspections to toilet construction at Urchin Point and The Block.

Journey of the hare-wallabies

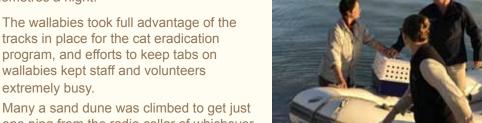
Twelve banded hare-wallabies and 12 rufous hare-wallabies were captured over two nights on nearby Bernier and Dorre islands, transferred via boat to Dirk Hartog Island, fitted with radio collars and released after dark the following day, 29

August 2017. All were released south of the cat-proof fence and initially they stayed close to the release sites but, by the end of September, the wallabies

were regularly moving several kilometres a night.



Blowholes



fence at Herald Bay. He then headed south

Dirk Hartog

Island Lodge

Lonatom

Sunday

Island Bay

ape Ransonnet



Above - DBCA officers Dr Colleen Sims and Kelly Rayner taking delivery of hare-wallabies; conducting health checks and fitting telemetry collars.

ake care

The wallabies tend to use vehicle tracks to get around so if you are driving on the island, please slow down and watch out for them, particularly between dusk and dawn.





Left - Unloading a prefabricated toilet for transport across the island.

Above - Loo with a view at Urchin Point.

Surviving and thriving

There was a small scare only two days after the release when one collar went into 'mortality mode', leading to a body search.

The team tracked the collar's signal and surrounded the bush emitting it. Suddenly, a very much alive banded harewallaby burst out of the bush. The initial fright of the search team was quickly followed by relief as the wallaby with a faulty collar raced for cover elsewhere.

There had only been one mortality when the monitoring team left the island early in December, a rufous harewallaby. Twelve banded and 11 rufous hare-wallabies were still alive and there were eight island-born young in pouches getting ready to contribute to the population in a few months time. This was an excellent outcome for a translocation of medium sized mammals.

While some of the collars were removed due to signs of neck rubbing, 18 animals were allowed to keep their shiny hardware for the summer.

Radio-tracking flights on 19 December 2017 and 22 January 2018 found all these animals alive and seemingly settled in favoured areas between Tetradon Loop and Cape Ransonnet. Some also seem to have clustered, suggesting social behaviour.

There will be two more radio-tracking flights before the research team returns between March and May 2018 to remove collars and conduct final health and breeding checks.



Turtle tagging

In January each year Shark Bay staff and volunteers embark on a pilgrimage to survey loggerhead turtles at Turtle Bay on the northern end of Dirk Hartog Island.

This year 372 turtles were surveyed, 183 (49 percent) of which were recaptures. One of the turtles has been surveyed at Turtle Bay seven times since 2003.

Local Malgana women took part in this year's tagging program, exchanging knowledge and experiences of the island, its inhabitants and annual visitors.



Above - Measuring a loggerhead turtle. Left - Dr Saul Cowen radio tracking near Tetradon Loop. Below - Kelly Rayner with volunteers Richard Variakojis, Auriah Lane and Claudia Buters preparing for a radio-tracking session.

Irapping

A Global Gypsies tour group volunteered on Dirk Hartog Island during October 2017.

Working with DBCA's team, the Global Gypsies used pitfall and other live-capture traps to catch small vertebrates.

The trapping was highly successful with four small mammal species and 30 reptile species captured during 10 days of trapping. Good numbers of several species were caught, which may indicate recovery of native fauna since the removal of cats.

This was deemed a very successful trip by all concerned and will hopefully be repeated in the future.

Teamwork

DBCA staff monitored the hare-wallaby populations on Bernier and Dorre islands before undertaking the mammoth tasks of capturing 24 animals, transporting and releasing them on Dirk Hartog Island and intensively monitoring them post-release.

Through all of this they were supported by Parks and Wildlife Service staff in Shark Bay, the Midwest Region, and other members of the Return to 1616 team. Support also came from Kieran Wardle, his family and employees at Dirk Hartog Island Eco Lodge, facilitating transport and accommodation on the island.

The DBCA team is now preparing the 2018 works program, including further hare-wallaby translocations.



Valuable vollies

Claudia Buters was on Dirk Hartog Island when the wallabies arrived. Sunshine and dugongs accompanied her and Dr Saul Cowen, the DBCA scientist leading the translocation work, as the barge took them to Dirk Hartog Island.

Although the arrival of the wallabies was delayed due to bad weather, Claudia said there was plenty of work to do while waiting. "Several days were spent finding innovative ways to cover old pastoral wells surrounding the release sites and preparing for the release."

With the wells covered, their next challenge was setting up the camper-trailer annex, a task that took several hours, five frustrated people and a lot of guesswork.

A new set of challenges arrived with the first group of wallabies - fitting each animal with either a GPS/VHF or VHF-only collar before their release in the evening; then monitoring the released animals.

Claudia said, "I'll never forget the look on Keith's face when we were greeted by a mortality signal on our first day of radio-tracking, only to discover the wallaby alive and well upon further investigation."

Her remaining days on the island involved walking up and down sand dunes and saltpans, and driving along tracks in the buggy; stopping to listen for wallabies with the radio tracker. In their spare time, Claudia's team dug out pitfall traps in preparation for the Global Gypsies' work.

"The three weeks I spent volunteering with the Return to 1616 project was an extremely rewarding experience and I can't wait to help out again in the future!"





Andreas Stricker took annual leave from his job with the Environmental Protection Authority in NSW to volunteer on Dirk Hartog Island and arrived as Claudia was leaving.

He describes his time as "characterised by a picturesque island with a remarkably variable landscape and amazing scenery, not to mention the cute animals that I had the pleasure of working on."

Andreas spoke highly about the outstanding working environment provided by Saul and his team. "This environment was created through careful planning, flexibility, and hard-working and joyful team members. This meant that our work-load was managed very well, and we could complete, and exceed, the goals of the trip without being burnt-out and disliking one another."

The volunteers found time to explore the island and eniov wonders like the blowholes, sand dunes, birdlife. reptiles and marine life, including a whale shark. Rest and recuperation were also made easy by the fantastic accommodation.

Andreas said he learnt much from the experienced Parks and Wildlife Service staff and fellow volunteers. "They were all more than happy to impart their knowledge and skills. As a result, I was able to learn and implement many of the survey methods used as part of the project, learn about the variety of fauna on the island, and also apply novel techniques that I would otherwise not know about."

"I had a fantastic time on DHI and, after learning about future plans for the project, am even more convinced that this is the area I want to work on in the future."

Above - Andreas Stricker and Kelly Rayner set up a camera near Sunday Island Bay.

Left - Claudia took this photo of a rufous hare-wallaby (Lagorchestes hirsutus) being released.

