

WIRRUWANA NEWS

UPDATES FROM DIRK HARTOG ISLAND

SUMMER 2019

This third edition of Wirruwana News tracks the first large-scale fauna translocation of *Return to 1616*, the Dirk Hartog Island National Park Ecological Restoration Project. The tracks of hare-wallabies are printed all over the southern part of the island and will be joined by smaller tracks of dibblers and Shark Bay bandicoots next spring.

Trackings of success

After the hugely successful 2017 trial translocation and positive monitoring outcomes of hare-wallaby source populations on Bernier and Dorre islands, it was time for the first large-scale translocation in Spring 2018.

It began with the capture team overcoming significant challenges posed by less-than-accommodating weather to capture hare-wallabies on Bernier and Dorre islands.

A total of 140 hare-wallabies - 50 rufous and 90 banded - were successfully translocated to Dirk Hartog Island through September-October. Twenty-three of the females had small pouch young, some of which have since left the pouch and begun moving towards independence.

Twenty-four of the translocated wallabies were fitted with radio-transmitters before release so the progress of a representative group of individuals could be tracked. A few (mainly banded) hare-wallabies managed to remove their collars after just a few weeks, but fortunately retained them through the critical early post-release monitoring period.

All collared animals were known to be alive when the translocation team left the island in December 2018. This indicates high post-release survivorship across the board.

Similar to last year, some animals stayed near their release sites while others went exploring.



Ryan John from Coral Coast Helicopters delivers hare-wallabies from Dorre Island to Dirk Hartog Island.



Banded hare-wallaby begins feeding while being released.

In three days a collared rufous hare-wallaby ranged 25 kilometres from the Surf Point track up to the western end of the management fence. It did the return journey south a few weeks later.

Wallaby tracks have been observed on the road and beaches from Cape Ransonnet right up to the management fence. Hotspots are around Surf Point, Notch Point and the Blowholes track.

There is clear evidence that the wallabies are using vehicle tracks to move from place to place, so we urge drivers to take extra care when travelling. Shark Bay District rangers have installed road-signs advising visitors of the presence of wallabies and requesting drivers to reduce speed between dusk and dawn.

The research team aimed to recapture all collared hare-wallabies for health checks and caught all but one - a very wary female banded hare-wallaby. The team also caught a few 'bonus' uncollared rufous hare-wallabies that strayed across the path of the catch team.

After two months, all captured adults were in good health, as were associated pouch young and young at foot.

Monitoring of the collared animals will continue with aerial radio-tracking over summer and the research team will return to the island in May 2019 to remove collars from animals before transmitter batteries expire.



As well as translocating and monitoring hare-wallabies, Saul Cowen finds time to check pitfall traps and field questions from Carnarvon youths and the media.

Contributors and photos: *Return to 1616* Research Scientist Dr Saul Cowen, Technical Officer Kelly Rayner, Principal Research Scientist Tony Friend, Ranger Phil Arthur, volunteers Aline Gibson Vega and Lucie Scheelen, Michael Lynn (Shire of Carnarvon), Global Gypsies, Casey Hill (Dirk Hartog Island Eco Lodge). Editor: Susan Pedersen.

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.

Return to 1616 fauna team volunteers

The *Return to 1616* fauna team are grateful for the valuable assistance of enthusiastic volunteers who are in turn getting helpful work experience along with some special memories.

One of two interns working with the team, Aline Gibson Vega, shares her account of the large-scale translocation of hare-wallabies from Bernier and Dorrie islands to Dirk Hartog Island.

"It was very interesting to experience firsthand the challenges of working so remotely. With limited vehicle tracks on the island we often hiked long distances to radio-tracking points.

Perhaps the greatest logistical challenge was transporting wallabies from source islands to Dirk Hartog Island. The only viable option was by helicopter! These wallabies truly get first-class service in all aspects.

Radio-tracking was a daily task for us. I'll never forget that hit of dopamine one receives when hearing that faint 'beep beep beep' from a collared wallaby that has not been heard for three days. It's impressive how such a small animal can move incredible distances in a short space of time.

I leave the island knowing that the wallabies have come to a utopia; an island with no introduced predators, plenty of space and plenty of food - the fat rolls on their tails don't lie!

Having this opportunity to work on Western Australia's largest island, and one of the world's largest ecological restoration projects, has been thoroughly rewarding. I've learned and experienced so much in three months. I've been very lucky to work in such a picturesque location with an incredible team. This work would not have been as rewarding if it weren't for Saul Cowen, Kelly Rayner and Colleen Sims being great mentors. I look forward to working with them in the future through my PhD."



Aline Gibson Vega and Mark Cowan checking and recording small animals caught in pitfall traps.

Dibblers on the move

The dibbler (*Parantechinus apicalis*) is one of two species currently ear-marked for translocation to Dirk Hartog Island in 2019. The second is the Shark Bay bandicoot (*Perameles bougainville*) until very recently known as the western barred bandicoot.

The first cohort of dibblers is expected on Dirk Hartog Island in early October 2019. Work began in November 2018 with 13 dibblers collected from two Jurien Bay islands and transferred to the captive breeding facility at Perth Zoo. Breeding at the zoo will begin in March 2019 with offspring weaned in September 2019.



Dibbler

Lucie Scheelen did four field trips volunteering with the scientists on Dirk Hartog Island.

At the end of her last trip she said "I can still smell the salty air. What a rewarding time the last three months have been. The scratches on my legs and arms are an account of all the fieldwork done during the past three months."

The work Lucie refers to was "...140 new hare-wallabies caught and translocated from Bernier and Dorrie islands to Dirk Hartog Island. Twenty-four of the wallabies were collared then radio-tracked until December 2018. All of them are doing great in their new home."

Lucie's tasks on the island included fencing wells, pitfall trapping, different fauna monitoring techniques and building exclosures for vegetation monitoring.

She said "I learnt a lot of new techniques during this time, and was even able to design my own trials. It has been an honour to volunteer in this ambitious and exceptional project, and work with its equally first-class team of scientists. Thank you."



Lucie Scheelen and Kelly Rayner setting up an experimental trial to monitor the rate of DNA degradation on hare-wallaby scats.

Captive breeding has previously been successful for translocations of this species. Dibblers do well in captivity and each female can produce up to eight offspring in a breeding season.

Although financially expensive, captive breeding is more viable for the few remaining wild dibbler populations. One pair of dibblers removed from the Jurien islands can provide up to eight young each year for release for two or three years - that's up to 24 animals for translocation to Dirk Hartog Island.

Preliminary work assessing the suitability of potential release sites based on food availability - invertebrate biomass - on Dirk Hartog Island has begun, and will continue in March 2019.

Science safari

Some people associate reindeer with the festive season but not tour operators Global Gypsies! They think of bandicoots, lizards and frogs and so do the 'voluntourists' and DBCA scientists who joined this year's Science Safari to Dirk Hartog Island.

The DBCA team supervising scientific activities on the joint project was led by Dr Saul Cowen ably assisted by Mark Cowan, Judy Dunlop, Aline Gibson Vega, Keith Morris, Janet Newell, Kelly Rayner, Lucie Scheelen and Colleen Sims.

The eager group of 'voluntourists' comprised Michael Bradley, Brian & Glynne Beaver, Ross Bunney, Wayne & Jill Fairclough, Anne Gilkes, Chris Lowry, Sandra Maynard & Jane Fenwick, Gerhardt & Aileen Strumpher, Judy Williams, Tour Guide Jeremy Perks and Safari Hostess Jo Clews.

For twelve busy days in October the teams worked closely together to set traps; capture, identify, 'process' and release a total of 501 mammals and reptiles; perform radio-tracking and monitoring activities; and record reams of important data.



Global Gypsies 'voluntourists' celebrate another successful joint Science Safari with DBCA.

The voluntourists also had a lot of fun, enjoyed delicious catering and visited some of the island's many scenic attractions.

In addition to the animal interactions, highlights included: dinner beneath a glorious full moon; crossing to/from the island on the DHI barge; plant and animal identification; finding a nest of newly-hatched kestrel chicks and visiting the Cape Inscription Lighthouse exactly 402 years to the day after Dirk Hartog first set foot on the island.

At the end of the safari Global Gypsies donated \$2000 from tour proceeds to the DHI Ecological Restoration Project.

Happy scientists, happy volunteers, happy critters!
Merry Critter-mas from the Global Gypsies!



Judy Dunlop holds a sandy inland mouse (*Pseudomys hermannsburgensis*) and an ash-grey mouse (*Pseudomys albocinereus*).

Gourmet Island Escape

Dirk Hartog Island hosted 'The Gourmet Island Escape' in August, an event showcasing fresh produce from the Gascoyne Region.

It began with Breads and Stews at Herald Heights on the west side of the island in the company of locals and people from all around Australia watching the sunset.

The next evening more than 50 people enjoyed a night of food and live music in the Old Shearing Shed. Celebrity chef Russell Blaikie's seafood paella exceeded all expectations.

Although a wet start to the day caused concerns for the Long Table Lunch, the skies cleared and chef George Cooper delivered a memorable eight-course lunch of unique creations.

It was a week of creating memories and new friendships.

Dirk Hartog Island will host the 'Gourmet Island Escape' again in 2019.



The Gourmet Island Escape kicked off with the Breads and Stews sunset.

Ranger report

Regular island patrols are conducted by Parks and Wildlife Service staff to foster awareness of park values and compliance with regulations. Rangers also undertake a range of projects and maintenance tasks on the island.

In 2018 volunteers and park rangers worked together to remove 20 hessian bags of assorted beach flotsam from Mystery Beach on the western side of the island. Further to this the public have also been collecting items from the coast, providing much appreciated assistance in maintaining these areas.

An annual visitor risk survey was recently conducted to ensure risk signs remain in place on the island. Risk signage is an important part of ensuring visitors are aware of potential hazards and how to avoid them.

Rangers recently accompanied local Indigenous people undertaking a cultural survey of an area proposed for a new airstrip adjacent to Herald Bay. An airstrip in this location will increase the productivity of rangers and *Return to 1616* project staff working north of Tetradox Loop. It will also provide an alternative airstrip in the event of wet weather and improve emergency response capabilities.

Highlighting the dangers of the western coastline was the loss of an angel life ring at The Block (West Point). Well beyond the usual wave zone, its sturdy post was knocked over and the ring taken by a huge freak wave. A new angel ring has since been installed.

Rangers have also erected 10 wallaby signs on the southern section of the island. These signs advise drivers to slow down between dusk and dawn when they are sharing the road with hare-wallabies.



Conservation employee Klaas Liezenga installing one of the wallaby signs.



Youth from Carnarvon clean-up Mystery Beach.

Next generation

Shire of Carnarvon Youth Services teamed up with Wula Gura Nyinda to create memorable experiences for eight young people on Dirk Hartog Island in Spring 2018.

The youth facility runs on-country education camps to help young people reconnect with country, education and community.

For their eight-day Dirk Hartog Island trip participants were responsible for planning, daily vehicle checks, helping with the cooking, and participating in activities like the beach clean-up, animal tracking, checking pit traps and finding bush tucker. They even drove the Dirk Hartog Island barge!

These activities expose participants to people and situations that show them the types of jobs available on-country. This gives them something to aspire to along with memories to help them through challenging times.

The group certainly had plenty of inspiration on Dirk Hartog Island. While travelling from Cape Inscription to the Eco Lodge on Mac Attack, they encountered a group of 30-40 huge manta rays. Prior to that, dolphins had put on a show for them while collecting 14 bags of rubbish at Mystery Beach.

Another highlight was the abundance of native animals found when checking pitfall traps. This included all three native mammals present on the island before *Return to 1616* translocations began - sandy inland mouse, ash grey mouse and little long-tailed dunnart. The group also found plenty of hare-wallaby tracks during animal tracking activities.

Inspiration also came from meeting and working with those working on the island, including Saul Cowen's fauna team. Carnarvon Youth Services will be back on Dirk Hartog Island with another youth group and Wula Gura Nyinda next spring.

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