

landsCAPE

Lures, cameras and action!

Cassowary population caught on
film after months-long survey!

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**Welcomed funding for
Cape York landholders**

\$2m to build climate and
drought resilience and
protect flora and fauna.

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Putting up barriers

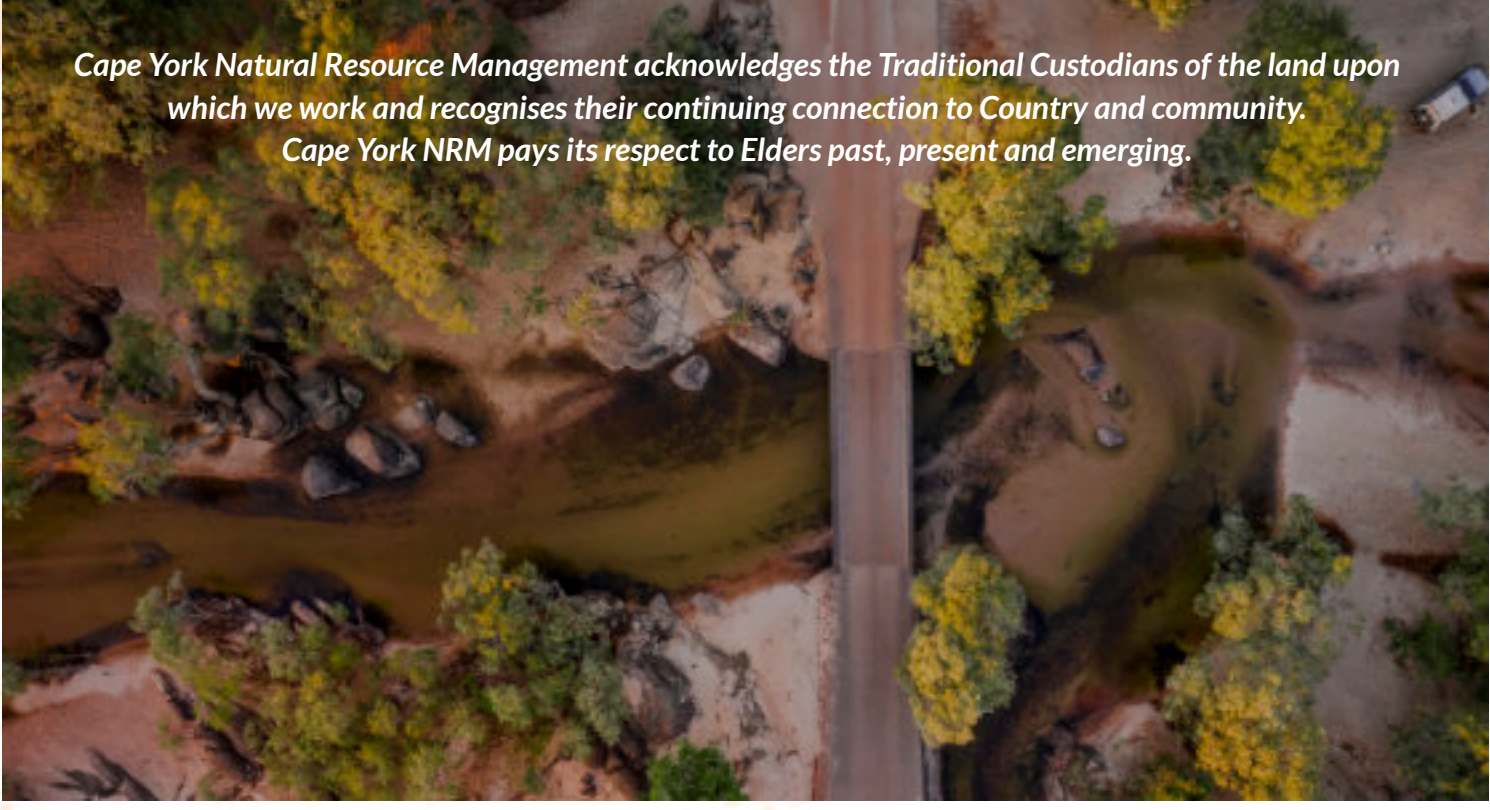
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**Soils providing answers
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Pioneering management
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Aboriginal and/or Torres Strait Islander peoples should be aware that this publication contains the images and name of a person who has passed away.

FROM THE CEO



ADAM SADLER

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Welcome. Our latest edition of LandsCAPE covers a lot of ground, with some terrific profiles on the people that make the region so unique, and of course, updates on the fantastic work we are helping landholders carry out to improve biodiversity and resilience on Cape York Peninsula. We are particularly pleased to receive great feedback from readers, so thank you for all of your support. Even better, we have been provided with some wonderful contributions for this edition, including pictures, a photo essay and information from like-minded agencies. This is what we were hoping for when we launched the magazine in July; to build a publication that doesn't just reflect our own projects, but incorporates stories and images from across the Cape. I hope you enjoy this second edition of LandsCAPE.

LURES, CAMERAS AND ACTION!

Wadthuuny population caught on film after a months-long survey.

More than 40 years ago, Myiesha Yoelu’s grandmother saw a Wadthuuny on Country in a remote section of Cape York Northern Peninsula Area.

The creature, also known as a cassowary, was special to her people. It looked after the rainforest ecosystems by dispersing native fruit seeds after eating and digesting them, providing a cycle of re-growth and prosperity.

That was the last time a Traditional Owner saw Wadthuuny.

The area in question is managed by the Ipima Ikaya Aboriginal Corporation (IIAC), made up of three clans: Gudang Yadhaykenu, Atambaya and Angkamuth peoples. It includes the recently renamed Apudthama National Park (from Jardine River NP).

Fast forward to just two months ago. Myiesha has learned there are at least 10 Wadthuuny now living on Gudang Yadhaykenu Country in the Ussher Point section of the park – four adults, four sub-adults and two striped chicks.

“I’ve never been so excited,” Myiesha said.

“I think the next step is for us to further monitor them throughout Country and take steps to protect this beautiful bird at all costs.”



It was a joyful surprise, also, for the team of researchers who went into the area in June this year, specifically to look for signs of cassowaries.

Their trip was triggered by a bird sighting in October, 2018, by Craig Dickman, the then Heathlands Ranger in Charge of the Queensland Parks and Wildlife Service.

QPWS put up remote trail cameras in rainforest pockets that same month. A cassowary was recorded at the eastern-most camera location in December 2018, and it seems the same bird was recorded again in September 2019, January 2020 and March 2020, after which the traps were removed.

Following discussions with the IIAC in late 2021, financial support and logistical arrangements were organised by Cape York NRM’s Biodiversity Project Officer Dr James Dobson for an IIAC-led systematic survey project to seek out any evidence of cassowaries, once and for all.

By June, James, together with Gudang Yadhaykenu Traditional Owners Pat Williams, Yunara Wymarra-Charlie and Mune Lifu spent a day being shown how to recognise cassowary signs (claw prints, scats [droppings]) and how to erect camera traps by cassowary consultant, Wren McLean.

The whole group then spent five days camping on Country and cutting trails through 28km of challenging terrain, following detailed geo-referenced maps, to install equipment in areas which would likely be suitable for cassowaries.

“We had no idea what we would find,” James said.

Until on their first day, when setting up camp, a cassowary came to visit.

“It was amazing,” James said. “We weren’t sure we’d see anything, let alone on the first day. I was so glad we experienced that, because it kept us going in the following days, which were tough.”

Pat, who led the team, said the first he knew of a cassowary in the vicinity was when he heard the call. Wren had been mimicking the sound for him, then he picked up on it close by.

“I heard its sound, and we were all silent, then it was here,” he said.

The only image captured was by Yunara, and while it was a distant shot, it was the proof of life they wanted.

For Wren McLean, the moment was “really significant”.



“We were so elated,” she said. “I felt like, really, it walked in to greet the Traditional Owners.”

Over the following months they waited, hoping the camera traps, which used lures resembling fruit, did their job.

In August James and a second Cape York NRM Officer, Harry James, travelled back to Ussher Point with Yunara Wymarra-Charlie and Albert Cottis to retrieve the camera traps. They found an additional scat when travelling up a beachside creek to retrieve camera 6.

“Yunara wanted to go through the images on the first camera right there in the field,” James said, with a laugh.

But after all cameras were collected the team went back to camp.

It was a hold-your-breath moment.

The results were more than anyone had imagined. At least 10 birds, and signs of a possible 11th.

The cameras captured 30 images – curious brown adolescents, looking knowingly into the lens; full pictures of the striking adults, with their red wattle hanging from their necks, black, hair-like feathers covering their large bodies and the bright blue skin of their head and fore-necks on display.

Looking more closely, two little striped chicks, comparatively plain but still fluffy-cute, could be seen in the grass close to their parents’ sides.

The unique casque, a large, greyish-brown helmet atop the adult head, helped identify the number of birds, as no one casque is quite the same.

“Yunara was excited by the images of pigs, as an avid pig hunter, but his face lit up at the first

cassowary as he turned the screen to show me,” James said.

“Seeing that first image was thrilling, but after sitting back down at camp with a stack of cameras, most with photos of cassowaries on them, we were buzzing.

“All our hard work had paid off in spectacular fashion and we had more images of cassowaries than any of us could have imagined,” he continued.

“Yunara said to me: ‘Wren, what a legend, clearly knew what she was talking about’.”

The Project results have been compiled in a report for Cape York NRM by Wren McLean entitled, “Caring for Wadthuuny (Cassowary) on Gudang Yadhaykenu Country, Cape York”.

In the report, Ms McLean noted the cassowary habitat was found to be relatively pristine, however, it was geographically restricted and thus the breeding population may be genetically isolated.

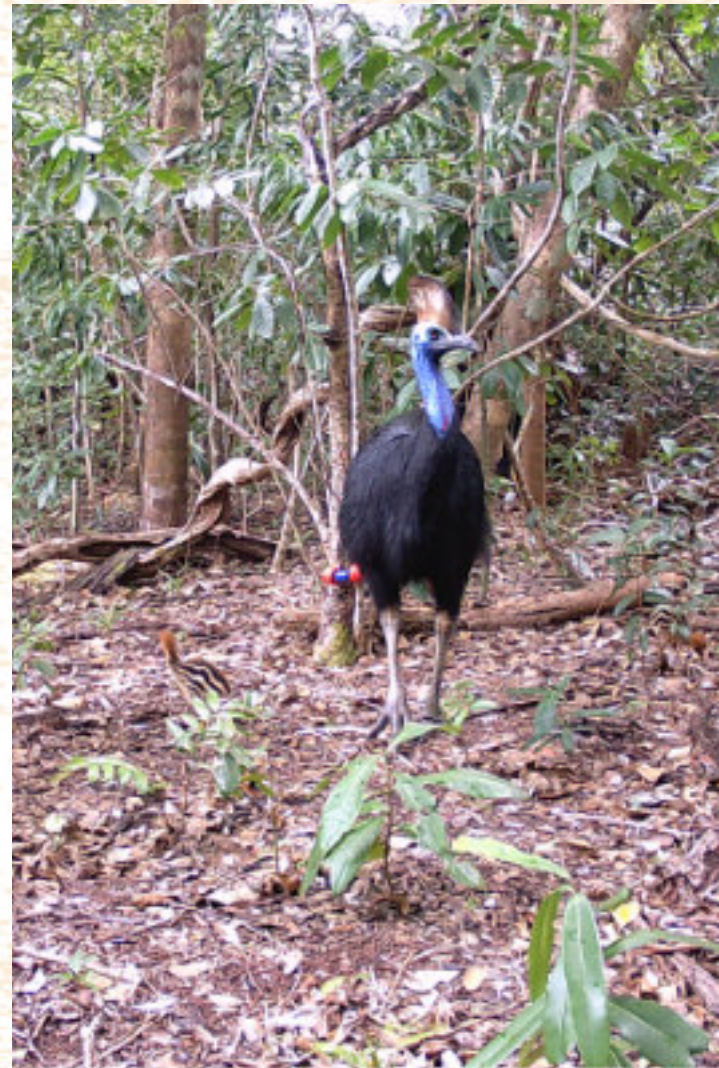
“Cassowaries remain a species of conservation concern and threats to this sub-population may be from inbreeding, reduced genetic diversity and increased extreme cyclones and wildfires in the face of climate change,” she said.

So what now for this surprise population? Are there more in outlying areas? Do they have enough food to survive the seasons in the patchy rainforests? How safe is the area from feral animals or human curiosity?

“One of the first things Cape York NRM will do is distribute the report far and wide to relevant government departments, organisations, the



○ 29°C 84°F 06/13/2022



○ 25°C 77°F 08/13/2022



museums, and so on. If people don't know they are there, how can we protect them?" James said.

"We'll also begin project planning that covers some of the Report's recommendations. Ipima Ikaya board members have indicated they would like to see signage erected to let visitors know cassowaries are in the area and to leave hunting dogs at home.

"While the Gudang-Yadhaykenu Country population might be safer from vehicles, habitat destruction and other threats their southern cousins might experience, it is still important to reduce pressures on this population to ensure they thrive long into the future," James added.

"There are still many more surveys to be done and gaps in known cassowary distribution."

He uses the recent sighting of a cassowary near the tip, even further north than the population his team rediscovered.

"This is extremely exciting news as it was thought to be extinct in that area since the 1980s. This area, along with the Temple Bay area, will likely be the focus of future surveys," he said.

Wren also noted that the population needs to be listed in the formal cassowary distribution maps.

The report makes a number of recommendations, one of which is to erect signage in the area to educate visitors about the cassowaries and their importance.

Cape York NRM also encourages reporting sightings on the Cape York NRM QR-coded cassowary sighting database.

This was developed in 2021 and involved creating postcards and posters which are distributed to outlets and campgrounds throughout the Cape York Peninsula. The materials have a QR code and people are encouraged to upload photographs of a cassowary, or other evidence of cassowary activity, such as footprints or scats, with a date and time, and with a simple click on the code.

"The more people we can get on board to build data across what is a very large region, the better," said James. "These birds are a national treasure, and we want to ensure their future for generations to come."

This project is supported by Cape York NRM, through funding from the Australian Government's National Landcare Program.

Please note: Cassowaries can inflict serious injuries. Never approach a cassowary in the wild.

For more information on Cape York NRM's cassowary project visit capeyorknrm.com.au.

FAST FACTS

- The Caring for Cassowaries project explores cassowary population and distribution in previously undocumented areas for east and north Cape York.
- Cassowaries are listed as Vulnerable under the Queensland Government's Nature Conservation Act, 1992.
- The southern cassowary (*Casuarius casuarius johnstoni*) occurs across parts of north-east Queensland and southern New Guinea. They are the world's third-tallest bird, at two metres in height.
- The role of the casque on the top of an adult cassowary is not fully understood. It may allow cassowaries to better push through dense forest, help them hear the low drumming sounds made by other cassowaries and be a sign of dominance and age, as the helmet continues to grow throughout the bird's life.
- Each cassowary leg features three strong, sharp toes. The inner toe possesses a long dagger-shaped claw that is used for scratching about the forest floor, fighting, and defence.
- Cassowaries live largely within rainforests, but often move through mangrove, paperbark, and other adjacent country.
- They feed largely on fruit, but also fungi, insects, and other small animals and are vital in spreading the seeds of rainforest plants they have eaten - by their scats. In fact, the seeds of some plants are unlikely to sprout unless they have first been eaten by a cassowary.
- The fruit you see in a cassowary scat is a great example of 'natural gardening' by these remarkable birds - spreading seed to maintain the future life and diversity of the forests they live in.
- Cassowary numbers have been seriously reduced due to habitat loss from clearing or damaging fires, as well as attacks by dogs, feral animals and collisions with vehicles.
- CSIRO estimates 4,400 cassowaries live in the Wet Tropics World Heritage Area, which does not take in the Cape York population.



PROTECTION FOR CAPE MELVILLE

A new project at Cape Melville will improve signage and manage access to protect the unique plants and animals in the popular national park.

The rugged land of Cape Melville is jointly managed by the Cape Melville, Flinders and Howick Islands Aboriginal Corporation and the Queensland National Parks and Wildlife Service.

Coordinated by Cape York NRM, the project is in response to increased creation of informal tracks, together with illegal camping and illegal harvesting of coastal vegetation for firewood, as well as damage being caused by feral animals.

“Cape Melville has a huge influx of visitors every year, being so beautiful and is one of those more accessible parks on the east coast,” Biodiversity Project Officer Dr James Dobson said.

“And those huge numbers of visitors aren’t always sticking to designated tracks, they’re making tracks into sensitive coastal ecosystems like littoral rainforests and dune systems. The funding will enable rangers to go in and put up signage and barriers to prevent access to these sensitive areas.”

“So we’re coming in from two directions,” James said. “My side of the project will be specifically blocking off tracks that lead to areas of littoral rainforests.”

This work required littoral rainforest surveying, which included a week of training with four Traditional Owner rangers in flora survey techniques, led by JCU botanist Dr James Hill.

The survey training was completed last week and was a great success, according to Cape York NRM Fire Coordinator Andrew Drenen.

“We learned about survey methodology and identifying the littoral rainforest community and the dominant plants therein,” Andrew said.

“The littoral rainforests were found to be in good condition, but under threats including cattle, wind and storm erosion, and human impact such as

unauthorised bush campsites.”

The coastal ecosystems side of the funding is being managed by Cape York NRM’s Coastal Ecosystems Coordinator David Preece, who will be assisting Traditional Owners in establishing fence-lines for riparian areas on coastal wetlands.

“It’s pretty isolated and many plants, like the foxtail palm, are found only in the park and nowhere else in the world,” Dave said. “And it’s more than just coastal vegetation. All sorts of creatures rely on the ecosystems, for example, the Torresian imperial pigeon (*Ducula spilorrhoa*), which is a significant cultural indicator of seasonal change and also a food source; fruit bat species – all sorts. It’s a very unique ecosystem and rainforest so comes with a unique assemblage of fauna.”

“But it’s also a very popular area,” Dave added. “While we’ll be protecting the sensitive areas, it’s important that people know they can still go there. The National Park still has official tracks open and provides designated camping areas for visitors to enjoy the beautiful beaches at Bathurst Bay.”

The National Park also features the rocky headlands of Cape Melville, granite boulders of the Melville Range, sandstone escarpments and inland dunes.

The Traditional Owners include the Aba Yalgayi, Muli, Bagaarmugu, Wurri, Manyamarr, Gambiilmugu and Yilrrku Aboriginal peoples.

Rangers are currently installing new infrastructure and the work is expected to be completed by this year’s wet season.

For more information on where you can travel in the park and camp, visit the QPWS website at www.parks.des.qld.gov.au/parks/cape-melville/camping

This project is supported by Cape York NRM, through funding from the Australian Government’s National Landcare Program and Reef Trust.

WELCOMED FUNDING FOR CAPE YORK LANDHOLDERS

Climate and drought resilience and protecting biodiversity focus of new program.

More than \$700,000 has been awarded to Cape York NRM to help support landholders in managing their properties to build climate and drought resilience, protect unique flora and fauna, and improve capacity to monitor outcomes.

“This is a welcome funding boost from the State Government, and a great step forward for Cape York Peninsula graziers. It provides continuity in the work we have been doing on the ground for the past four years,” Cape York NRM Sustainable Industries and Water Quality Manager Michael Goddard said.

“We will use this funding to assess gaps in landscape resilience on grazing properties and support on-ground actions to deliver improved land and vegetation condition under our Landscape Resilience Project,” he continued.

“The rest will be used to implement a more standardised measurement and reporting process for landholders under the Improving and Embedding Monitoring and Evaluation Project.”

In announcing the funding in November, Resources Minister Scott Stewart said in a statement: “The condition of our soil and our native plants and trees is critical to Queensland’s food and fibre, resources and tourism industries and the good jobs they generate.”

Cape York NRM will work with six properties to address priority land condition issues over 1,000 hectares and threats to native vegetation condition over 1,500 hectares.

Project officer Natalie James said the work will offer long-term investment, such as increased riparian fencing, reduced paddock size and installing more watering points for cattle.

“This will improve infrastructure and make Cape properties less vulnerable to year-to-year changes in climate and markets,” she said.

“Landholders up here face a number of challenges particular to the region, including poor soils and harsh weather events, with less return than the smaller southern Queensland properties.

“Plus they work across vast distances, often in isolation, so the projects will combine knowledge, management and monitoring and will also provide a chance for graziers to connect with each other, and with support systems, as we work with them.

“Ultimately, it all moves towards improving the health of the country, and that can only be a good thing for the years ahead.”

The Projects are being funded under the Queensland Government’s Natural Resources Recovery Program.

To review the Minister’s statement visit this link www.statements.qld.gov.au/statements/96526



TOM AND SUE SHEPHARD

GIVE ME A HOME AMONG THE ANT HILLS

"I have moved 15 miles in my life," Tom Shephard rasps with a chuckle, "from Musgrave south to Artemis."

The cattle farmer sits at the large dining table, reflecting on his 75 years on the Cape York Peninsula. He's a link in the history of the Old Musgrave Telegraph Station, where he was born and raised, and more broadly, to the old and new ways of life on the Cape.

"You could read my book but I haven't wrote it yet," he grins.

He and his wife Sue live on Artemis Station, which incidentally, used to be called "15 Miles" - the distance from Musgrave - until Tom renamed it after the Land Department map title from the 1800s.

The couple is fondly regarded around the Cape, and in particular around the Lilyvale, Musgrave and Artemis region, located between Laura and Goen.

Their knowledge, dedication and connection to the country, the Indigenous communities and Elders, and to the rare Golden-shouldered parrots that live on their property, have earned them a respect that comes with age and time.

Tom was a tough young kid growing up on Musgrave. Originally built in 1886 as the telegraph station, one of six to service the overland Cape York Telegraph Line from Laura to Thursday Island, Musgrave was bought by his father Fred Shephard in 1931, when it was no longer operating the line.

As his siblings were much older (the nearest one 10 years above him), and his father died when he was just four, Tom's life was about hanging around with the Indigenous kids, going hunting and fishing.

"I grew up with them, I used to live with them. They looked after me a lot. Whenever they went somewhere I just followed them around," he says. "All those fellas were old mates, they're dying out now."

School was not popular with the boy. He did several years of correspondence, then four or five years in Cooktown, then one final year in Cairns, before he left at 15. In between times, he worked the station with his siblings. He was about nine when he started the twice-a-year collection of cattle.

"Mustering time was all pack horses and wet camps, blow flies getting into your swags and laying eggs, maggots in meat, in the bedroll," he says. "We'd just go for weeks at a time. We didn't know any different - that's was the life."

Musgrave was where everyone congregated, Toms says. It was the central hub for the region, a meeting place, a mail collection point, and a stay-awhile for workers, Indigenous groups and the occasional adventurers to the Cape.

It was also where a young housemaid caught Tom's eye.

Sue arrived at Musgrave in 1970, at 17 years old.

"I grew up in Herberton on a farm, then went to work out west a bit, before getting the job at Musgrave," Sue says as she prepares dinner.

"I wasn't interested in town, I didn't have much to do with it," she laughs.

She slotted into life at Musgrave easily and enjoyed the comings and goings of the homestead life. There were all sorts of people and a lot of pensioners, she says, both black and white, who didn't work anymore.

"That was their home," she says. "They just used to get too old to stay out working [mustering, mining, etc] and had nowhere else to go so they'd come back where people could look after them."

Yes, it was bit a it like a retirement village, they agree.

By the mid-70s, Tom and Sue were married. Tom's Mum retired to a home in Mareeba and the estate, which included Lilyvale and Artemis, was divided amongst the family. (Musgrave was eventually renovated and transformed into a Roadhouse and camping grounds, which continues to be run by next-generation Shephards.)

Tom and Sue did a six-month stint out west but didn't like the country; "too many bloody flies", quips Tom, and they bought out the Artemis property.

The cattle station is "125,000 hectares, or 483 sq miles, 1250 sq km - don't ask me the acres, I don't know that", Tom laughs.

But they do know every gruelling inch of it. While times have improved and the station is enjoying good cattle prices and effective mustering systems, it was not always like that.



They bought a side tipper and did road work which supplemented their income in the "hard years".

"And we changed our bloody ways of mustering, anyhow. Big time," says Tom. "We had to work something out to survive."

They introduced helicopter mustering but found it missed more than half the cattle on the vast property, and horseback was about the same.

Now, using motorbikes and trap paddocks the cattle "muster themselves" and it takes about two days to rally about 4,000 cattle.

"We worked out the trap paddocks, they were used years ago, and we started it again. It's a much better percentage, nearly 100% if done twice a year."

"The paddocks are about 2-3 km around, and spears come in and go out," explains Tom. "They [the cattle] go in for water and lick, and when we want them we shut the outlet and we bring 'em home and clean 'em up."

For anyone imagining long pointed sticks along the fences, don't be alarmed. The "spears" are like the steel bars you go through at a train station which point a certain way and which you can't go back through. It's a lot less stressful for cattle once they're used to them.

"We reckon it's a good way, anyhow," says Tom.

Like themselves, Tom and Sue's three children have grown up in the rough and tumble of station living.

"I reckon they had the best childhood ever," says Sue. "They had all the aboriginals here, they could go fishing and hunting, riding motor bikes."

Tom and Sue have a chuckle and their faces wince as they recall the time one of the kids riding a motorbike jumped a tractor tyre and sailed over it

and into a barbed-wire fence. Another time their six-year-old came back with a mob of kids carrying crocodile eggs. They'd been down to the river bank and found the eggs by poking sticks into crocodile nests.

"They all survived, anyway," Sue says.

One of their sons has lived at Artemis all his life, and has his own house nearby, another son owns property on the Tablelands and their daughter is in Cooktown on a property.

Sue says they love it here, and would probably move back as well if there was room.

"They all come back and work here whenever they have spare time. Kerry has been bringing her kids here mustering since they were too little to stay awake for the whole day. You'd ride a bike and hold the kids while they were asleep," Sue continues.

Tom adds that they'd then wake up and start yelling at "Gammy" to catch their bull!

One of the grandsons is currently working from the station, a tall, polite young man who comes into the kitchen accompanied by another worker, and they help themselves to the dinner warming on the stove. It's been a long day and they quietly eat, and join in a little conversation before cleaning up after themselves and heading into the night.

Sue has made enough food for anyone who may stray inside during the evening. It's something she has done all her grown life.

Sourced from the large vegetable gardens that surround the animal pens near the main house paddock, Sue says: "everything here gets eaten".

Earlier in the day, we watched Sue patiently feed the animals. It's a ritual she has expanded to include any young visitors who camp at the station. Pigs, ducks and ducklings, dogs, goats, chickens and even the retired muster horses all stir as a



couple of little boys collect eggs, throw seeds, and pet the creatures.

All around are fruiting passionfruit vines, clusters of tomato bushes and trees overflowing with juicy limes.

Like Musgrave, Artemis has a tradition of welcoming visitors: workers, campers, researchers and, most regularly, bird-watching enthusiasts.

“We used to get so many international visitors, but that all ended with COVID,” she says.

Still, there are a number of campers and caravanners dotted about a purpose-built area, that also includes self-contained dongas and public facilities – complete with “donkey showers” (Tom chops the wood to light the boiler in the afternoon to ensure hot showers).

Apart from being a restful stopover, it is a bird-watcher’s paradise. At dawn, a wall of sound blasts across the sky, an occasional galah screech or sweet tone of a parrot pierces this confluence of calls. It is something to hear, and over all too quickly as the sun begins to heat the earth.

Artemis is also special for another reason. It is one of the few locations in the region to harbour the rare and endangered Golden-shouldered parrot. Some 25 years ago, scientists Gay Crowley and Stephen Garnett came to the station with their two children and asked to study the birds. They stayed on the property for three years establishing precious baseline research which has been building to this day. The Artemis Nature Fund was also established to support further research as an independent not-for-profit body.

Sue and Tom’s passion for the Golden-shouldered parrot is evident, and a lifelong friendship has sprung up between the Shephards and the scientists.

Before dinner, as the sun was setting, Sue had issued a surprise invite to go to a favourite spot to view an old parrot nest. She enthusiastically drove us along a sandy track in the four-wheel-drive buggy before slicing off into what seemed to be a random direction across bushland.

We arrived at a clearing which is officially one of the research areas for the Golden-shouldered parrot.

Woody thickening, where saplings and bushes have grown so close together that predators, such as cats and butcher birds, are able to hide and attack the nests, has been cleared. It took almost three years to get legal permission. More GPS research is tracking whether the number of butcher birds has reduced as a result of the clearing.

Around us a strange graveyard of anthill headstones burst from the ground in assorted

shapes: tall and bulbous, short and fan-like, ornate edifices resembling carved medieval castles and cone-like towers. The latter is favoured by the little parrots for their nests. They drill out a round tunnel into the mound, where they can get a 180-degree view of anything (particularly predators) nearby.

The old nest hole Sue showed us is smooth and deep, perfectly cylindrical in a mound that feels like cement. How do they dig out this remarkable bit of engineering? By choosing to do their work during the wet, when the ant mounds have softened. Inside the hollow is pristine, a result of the symbiosis with the ants and special moths that feed off the nest debris.

There are not so many of the birds now, Sue said, about 50 on the property. There is a sense of urgency in finding new ways to preserve their habitat and keep those still around alive. New reports and assessments are emerging of fire management regimes, feral animal control and habitat renewal across the region.

At Artemis, as part of this work, a feeding station has been set up just a short walk from the camping grounds to supplement the birds’ diet.

There you can find paparazzi twitchers, khaki-clad from head to foot, pointing their gigantic camera lenses at the perches. A movement, and the rapid-fire clicks alert you to a shy newcomer.

It is now morning, and we are having breakfast and a last-minute catch-up before we leave. Tom and Sue plan out their day, and discuss shopping and appointments which they must travel distances to achieve.

It’s a luxury they know will end as soon as the wet arrives, so they build up their stores in “town”, which is either Atherton or Mareeba.

The wet season, when it comes, is also a time to rest. It used to be a time to catch up with neighbouring property owners as the roads south became impassable.

“We don’t have a cricket match anymore, there’s not a lot of people around, these days.”

But the Shephard family do all get together, meeting up and picnicking at safe swimming holes and “taking over” Musgrave on Thursday mail days.

What is the pull of this remote property?

“Well this is home,” Sue smiles at her own bluntness. “You have a home, don’t you?”

She elaborates: “I think you get used to it and see the beauty of all of it, when it’s wet, when it’s burnt and it’s horrible and when it’s really, really dry and everything is dying, it’s still got character, it’s still home.”

ABOUT THE ARTEMIS NATURE FUND

Parrot habitats on Artemis have become thick with trees and shrubs because of grazing and altered fire regimes. As a result, ambush predators, such as butcherbirds and feral cats, are now more common and hunt more successfully on parrots at all stages of their life cycle. Some important food plants have also disappeared.

In order to save Golden-shouldered Parrots on Artemis, some 5,000 hectares of habitat will be restored to an open structure using a series of management actions which have been developed in consultation with Thaypan and Olkola Traditional Owners, through the Golden-shouldered Parrot Recovery Team. They include:

- allow grasses to recover by managing cattle. Artemis is a working cattle station so it is important a grazing regime will allow parrots and beef production to co-exist.
- areas will be thinned or cleared, to reset habitats to an open state. This includes areas where parrots still occur, but also areas which have been abandoned.
- maintain the open structure of habitats into the future, a specific fire regime will be applied.
- feral animals, such as pigs and cats, will be controlled.



For more information on the Artemis Nature Fund visit www.artemis.org.au

GOLDEN-SHOULDERED PARROT RECOVERY TEAM

The Golden-shouldered parrot recovery team is lead by Traditional landowners Olkola Aboriginal Corporation and involves Artemis Station, representatives from four other Traditional Owner groups of Kunjen, Wakaman, Thaypan and Kokoberrin, Bush Heritage Australia, Cape York NRM and Queensland Parks and Wildlife Service.

The most recent forum facilitated by Cape York NRM was held in August in Cairns with the aim of reviewing progress made in protecting and caring for the rare bird.

The forum discussed recent surveys carried out by landholder groups to verify what was predicted on the modelled mapping of potential habitat parrots could move back into, however, some surveys were hampered by late rains and few-to-no parrots were found.

Potential habitats need modification by fire and other methods being trialled to provide resources for the parrot survival and to limit access to ambush predators threatening the birds and their nests.

A presentation by Dr Gabriel Crowley, who has been studying the birds for more than 20 years, reviewed changes in canopy cover in the bird's habitats from 1990-2018 and pointed to major thickening of bushland as a key factor in the reduction of nesting sites.

The Artemis Nature Fund also presented trials that have been undertaken since 2019 to open up

parrot habitat to reduce ambush predation risk. This initially required legal negotiation which took two years before native vegetation could be cleared under the Vegetation Management Act 1999. They then restored areas that had been mapped as historical grassland ecosystems.

Predatory birds in those areas were GPS tagged and results showed they did not enter the restored areas.

Colour-banding of the Golden-shouldered parrot has also provided a way to monitor the bird's survival and population trends.

Discussion on the best ways forward for all groups at the forum included following the Artemis Station trials of clearing identified habitats of thickened vegetation and to consider using feeders, similar to those used at Artemis Station, to attract the birds back into restored areas

It was also agreed that TOs from each region should be given the opportunity to continue learning from trials undertaken on Artemis Station and work together with neighbouring groups, by going on field trips where they can share information and knowledge and develop a united front to save the endangered parrot.

This project is supported by Cape York NRM, through funding from the Australian Government's National Landcare Program.



UPPING THE ANTE TO KEEP TURTLES SAFE

Results are in under a new Eastern Cape York partnership.

More than 365,000 hectares of Cape York Peninsula’s east coast was included in two aerial feral pig control assignments for the Eastern Cape York Turtle Protection Partnership.

Approximately 1,220 feral pigs were culled as part of the project which aims to monitor and reduce the impacts of feral pigs on turtle nests and wetland values for the region.

The results are the first for the Partnership which was created last year through Cape York NRM, supported by the Australian Government.

Its members include Queensland Parks and Wildlife Service, Lama Lama, Wuthathi, Rinyirru, Cape Melville and Flinders Howick Islands.

The Eastern Cape York Turtle Protection Partnership is one of two pig control programs contained in the Cape York Demonstration Site for the National Feral Pig Action plan, the other being the highly successful Western Cape Turtle Threat Abatement Alliance (WCTTAA).

“We are pretty happy with these initial results coming through,” Cape York NRM’s Coastal Ecosystems Coordinator David Preece said.

“The two culls were carried out in November-December 2021 and February-March 2022; before and during turtle nesting seasons. Evidence of turtle nest predation was detected during the latter control program.

“This gives us a measure to see whether the nests in the next season have less predation following the culls.”

The project aims to develop an ongoing monitoring program, with training provided to Traditional Owner ranger groups, on-ground nest protection and air observation and pig control.

“Over 80% of eastern Cape York is Indigenous-owned land, including National Parks jointly managed with QPWS,” Dave said.

“QPWS has been carrying out feral pig control operations throughout Cape York for many years, but this Partnership enhances their work through the extension of the control area and by increasing the understanding and capacity of landholders. We are aiming to see a coordinated approach similar to WCTTAA’s in the coming years.”

The Western Cape alliance was formed in 2013 and forms the other arm of the NFPAP Demonstration Site. Its members include:

- Northern Peninsula Area Regional Council Apudthama Rangers
- Mapoon Land and Sea Rangers
- Nanum Wungthim Rangers, Napranum
- Pormpuraaw Land and Sea Management
- Kowanyama Rangers
- Aak Puul Ngantam (APN) Rangers, Aurukun

It has been undertaking monitoring and data collection as well as on-ground protection, for example, feral pig control and nest “caging”, with the result that predation rates for the Olive Ridley and Flatback nests have reduced from approximately 90 per cent in 2001, to under 30 per cent in 2021, with some areas achieving only 10 percent lost to predation.

The Eastern Cape partnership hopes to similarly improve the survival rate of endangered turtles and their clutches on the coast, as well as protect the high-value wetlands, floodplains and coastal vegetation found in these control areas.

A report by the QPWS further broke down results for the two aerial shooting culls conducted on 18 to 20 November and 1 to 4 December 2021.

In the North East sector of the Cape, 10 pigs were controlled, and in the South East sector, 66 pigs on Lama Lama and Running Creek Nature Refuge; 140 pigs on Cape Melville and 721 pigs across Rinyirru were controlled; a total of 937 pigs.

A QPWS Pest Animal Control Project report noted that the North sector figure appeared low on face value, because this operation nearly exclusively targeted individual pigs actively foraging along the coastline.

“The benefits of removing these pigs are significant. This northern section of coast has been preferential for nesting turtles on the east coast and as such the nest density is greater, exposing many nests to predation by individual pigs and even in a single feeding event. Typically, it appears nest predation is a learnt behaviour most commonly by large boars. Removing these specific animals can create an extended period of reduced impacts.”

A second, more recent report, summarised results from the 22 to 24 February cull (North Cape sector),

which similarly had a low number of nine pigs; and the 8 to 10 March cull (South Cape sector) which had a total of 280 pigs (131 pigs on Lama Lama; 63 pigs on Cape Melville, and 86 pigs across Rinyirru).

“The project successfully controlled nine feral pigs in the Northern control sector. Three destroyed turtle nests were observed [here] in very close proximity to one another. This is a high-value nesting area. Two pigs were dispatched in this area during the control. This was the same location where numerous destroyed nests were observed during the November 2021 survey. During that control effort no pigs were located or dispatched in this area. It remains to be seen whether further pig impacts will occur early in the coming nesting

season or whether the pigs destroyed were solely responsible,” the report said.

“Overall, the control effort was a great result considering that no pigs were controlled in the Northern control sector during the hatchling season the previous year – February, 2020.”

Of the 280 pigs controlled in the South Cape control sector, a number of these animals were in the vicinity of the beaches. This was an “excellent result” for the project, the report said.

The Partnership will conduct further controls in 2022-23.

This project is supported by Cape York NRM, through funding from the Australian Government’s Reef Trust.



PUTTING UP BARRIERS

What’s in a fence line? Far more than posts and wire, far more than a division of land. It’s a barrier against cultural destruction, according to the Binthi Warra peoples.

Muwanta-Walnga Lagoon is an impressive expanse of water, found at the junction of the Mclvor and Morgan Rivers.

It is known as thaman for the Binthi Warra people - a “place of bounty”, teeming with wildlife and surrounded by rainforests, wetlands and mangroves.

But in recent years this sacred area has been challenged. Muwanta is edged by muddy stretches of trampled, churned-up soils and vegetation, and water murky with sediment - a victim of feral pigs and stray cattle.

Which is why Cape York NRM, together with Binthi Land Holding Group Aboriginal Corporation (BLHGAC), began a fencing project to protect and preserve this special region.

“It may seem like a simple project, putting up a fence, but it is much more than that,” Cape York

NRM’s Coastal Ecosystems Coordinator David Preece said.

“This place has so much history, so many cultural references. The fence has a lot riding on it.”

The project began with the hiring of heavy machinery to clear the fence line and boundary line some months back. The whole area of the lagoon and nearby sand dune is to be enclosed with a 2km long, heat-resistant meshed fence and strainer posts reinforced with concrete to ensure they don’t move when the soil softens.

All of the materials and site preparation is funded by the Australian Government and facilitated by Cape York NRM.

The actual fencing is being carried out by the three families that make up the BLHGAC and is expected to be complete by the start of the wet season.

BLHGAC’s spokeswoman Ramona Mclvor is the go-to person for anything related to the corporation’s legal compliance and grant applications, grants that are relevant to the cultural, economic, environmental and social aspirations for land management and protection of Binthi traditional lands.

She said the division of labour for the fencing was an important part of the mentoring program between the Binthi clans. The majority of the Binthi Warra are descendants of tradesmen and cattlemen who want to pass on their knowledge.

“There will be opportunities for fencing certificates for the trainees to help them build their capacity,” she said earlier this year. “It will also provide them with the pride of a job well done.”

There is a lot at stake with the project. Apart from its natural attributes, the Muwanta-Walnga Lagoon is within the area of BLHGAC’s National Heritage Listing nomination for the Binthi Warra Indigenous Heritage Places ‘Thaman’ and ‘Yiirmbal’.

“National Heritage Listing can protect an area, however, it does not block the invasive pests from entering the site. Fencing it off is an excellent way for added protection,” she explained.

“And it is vital for our heritage to protect this place. Our families are Binthi Warra (belonging to the Binthi clan). We are Waandarr, or white cockatoo people of the Guugu Yimithirr Nation. The brahminy kite (wondil), centipede (galaya) and the nightjars (Caprimulgidae) (wambal) are our totems.

“As the custodians of our land, it is our duty to care for our sacred and special friends/totems and responsibly protect our clan, land and sacred sites.

“We are trying to achieve the highest protection of Binthi Country using the legislative frameworks

and working in partnership with key agencies. Since the 90s we have documented and recorded the boundary of our country and the stories passed down the generations. Most of the sacred sites are documented, however, there are more areas that have to be mapped, especially our cave paintings.”

Ramona relates a story that underlines the cultural importance of Mowanta.

“It was the traditional site for ‘marriage ceremonies’ between the White Cockatoo (Waandarr) and Red-tailed Black Cockatoo (Ngurraarr) clans,” she said.

“From when the lily roots were edible, this particular time was when the invitations were sent to the neighbouring clans for this festival to feast, celebrate and dance.

“We are proud hosts of a very significant part of Australia, with stories that are very endearing.”

BLHGAC plans to support its members to become innovative Indigenous entrepreneurs combining traditional and modern techniques to manage the land and build cultural and eco-tourism, heritage significance and self-determination, Ramona said.

“Binthi Country is a prime destination for cultural and eco-tourism ventures, such as our Bird Watching Venture,” she continued.

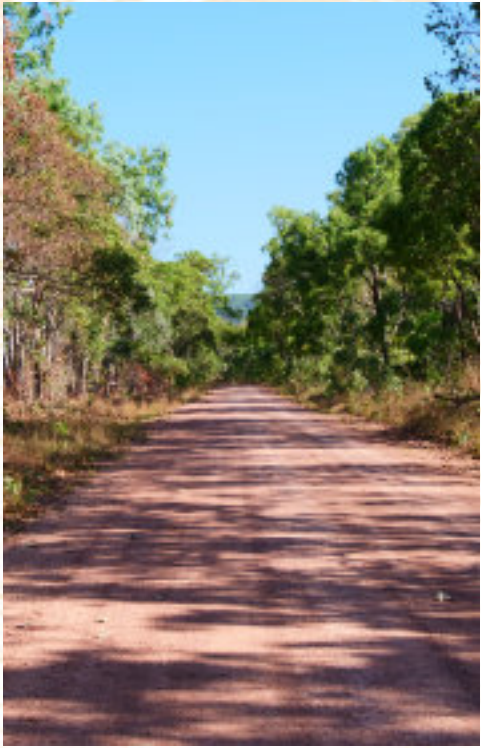
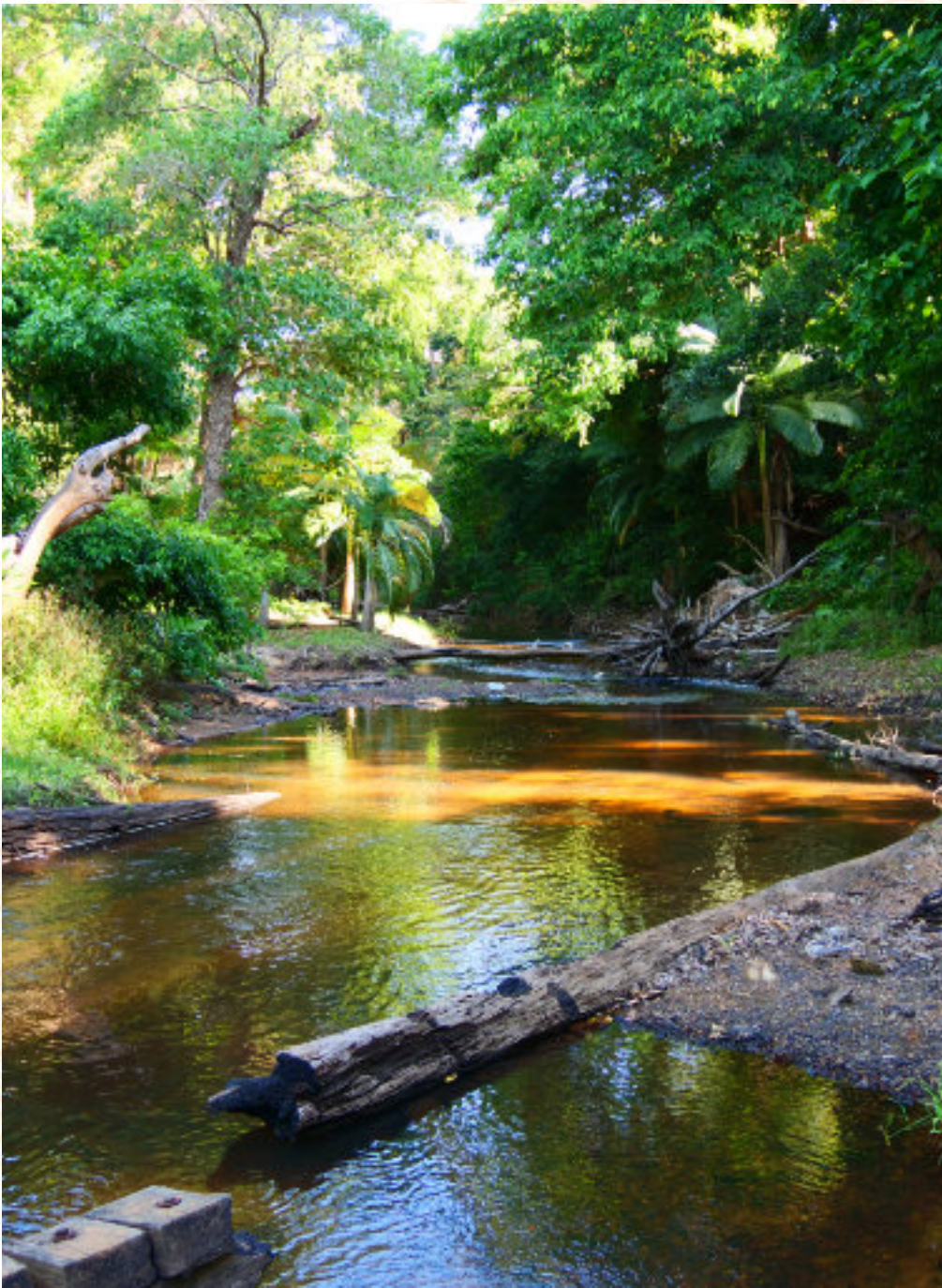
“We want to share our unique stories here, in



Image above: Feral animal damage



Image above: Binthi Country. Photo By: Kerry Trapnell



addition to the agricultural and primary industry projects we are planning.”

The fencing project will also establish a photographic history of the lagoon’s transformation, according to David Preece.

“We’ll be setting up cameras at set points around the waterway to capture the changes and improvements,” he said. “It should recover well, particularly after the wet season. We will start to see some change then.”

Erecting the fence also improves wetland biodiversity and connectivity of Binthi Country in the Mclvor River and Morgan River Areas within the Jeannie Catchment, Dave added.

From an environmental point of view this will:

- provide a buffer against coastal erosion, storm surges and flooding which helps build resilience to flood and cyclone events
- help maintain or improve water quality by transforming and retaining nutrients and sediment from run-off which would otherwise go into creeks and rivers that flow to the ocean. This in turn benefits humans by providing clean water
- play a vital role in the carbon cycle by sequestering and storing carbon dioxide thereby reducing climate variability
- provide an important nursery for varieties of fish and crustaceans, including many that form the basis of economically important fisheries
- provide habitat vital for the survival of a range of plants and animals
- provide many opportunities for recreation and tourism and support research and educational activities

- deliver a range of products such as medicine, food and water vital for people, livestock, agriculture, and industry

- provide important cultural, spiritual, or aesthetic services and improve human well-being

The area is also part of a National Heritage Listing nomination by the BLHGAC.

“Cape York NRM fully supports this nomination,” Dave said. “We value our partnership with BLHGAC and respect their commitment to protecting their heritage places.”

This project is supported by Cape York NRM, through funding from the Australian Government’s Reef Trust.

FAST FACTS: BINTHI COUNTRY

- It is approximately 40km north of Cooktown on the Mclvor River.
- The area is rich in cultural diversity and significant to Binthi Traditional Owners, with many ceremonial sites, story places and blue ochre cave paintings.
- Its surrounding areas also include undisturbed catchments with diverse ecosystems including vine forests, rainforests, mangroves, swamps and woodlands.
- A prominent feature of the landscape is outstanding dune systems.
- Binthi Land Holding Group Aboriginal Corporation (BLHGAC) is a small organisation that is building a platform for proactive land management on Country



WHEN NATURE NEEDS A REFUGE

From wetlands and salt plains to rainforests, a series of site visits were carried out on Cape York Peninsula as part of a new pilot project to help landholders manage their Nature Refuges.

During early November Cape York NRM’s Fire Coordinator Andrew Drenen went to three Nature Refuges - two on KT Land Trust and one on Running Creek - to get to know the areas, and assess the values of the sites.

“They have unique vegetation, or biodiversity, with a bit of everything - quality woodland, river corridors - they are always going to be of high conservation value. The Running Creek nature refuge was quite diverse with all sorts of different habitats; wetlands, salt lakes, coast,” Andrew said.

The Nature Refuge Landholder Services Delivery Project aims to offer more ongoing support and financial advice on grants assistance to landholders in the management of their refuges, as well as provide more information about the Private Protected Area Program for people wanting to establish a refuge.

Nature Refuges are a way for private landholders to protect biodiversity and cultural values of their property, or sections of their land, in a legally binding agreement with the State Government, for future generations irrespective of who owns the property.

These voluntary agreements currently protect over four million hectares of Queensland, which is the largest private conservation protection program by land area in Australia, according to State Government data.

The Landholder Services Project is being managed by Ecosure, with Cape York NRM providing support through site visits and workshops, the first of which was held in early November in Coen.

Nine attendees, including some who were interested in the concept, took part in the workshop.

“They asked a lot of great questions,” Andrew said. “Tony from Ecosure gave a presentation about feral animals and control, I gave a presentation on fire management, Toby (Toby Eastoe, Cape York NRM Fire and Biodiversity Manager) gave a presentation on funding opportunities and how to apply. They all generated a lot of really good discussions.”

Under the program, funding assistance can come in the form of:

- Weed control
- Fencing to restrict stock (wildlife friendly)
- Developing pest animal and plant plans
- Revegetation of degraded areas
- Fire management
- Erosion control
- Surveys and monitoring
- Environmental Interpretation signs

“The benefits of nature refuges are access to funding, of course, that helps implement one’s on-ground conservation actions and priorities. I also think, in a way, it’s an assertion of your land rights. It’s a voluntary program, which shows a strong commitment to protection of natural values into the future,” Andrew said.

A second workshop scheduled for Cooktown in December has been postponed and will be held in the early part of 2023.

This initiative is delivered through Queensland Governments Private Protected Area Program.

When a landholder signs a conservation agreement, they are supported by the Private Protected Area Program within the Department of Environment and Science. As part of this support, landholders receive access to Nature Refuge Landholder Grants (NRLG) which provide financial assistance through a grant application process.



COORDINATION THE KEY TO EARLY BURNS

Early aerial burns have played an effective part in reducing wildfires.

Some 33,500 incendiaries were used across 22 properties on Cape York Peninsula in aerial burns which help landholders manage properties over the dry season.

Most of the burns were conducted in the early part of the season to ensure there would be less fuel on the ground for later electrical storms.

“The objective, generally, in fire management in early aerial incendiary burning is to get firebreaks all through the landscape to stop the late season uncontrolled wildfires. And to make sure we get those breaks without gaps in them,” Cape York NRM Fire Coordinator Andrew Drenen said.

“Effective firebreaks can protect property such as homesteads and Indigenous cultural assets, protect wildlife and prevent threats to the environment. The larger, more intense wildfires of the late dry season do more environmental damage, which of course, creates soil erosion that washes out into the Reef.

“The first step is the planning, then we use a helicopter to do the work. Incendiaries are allocated across those properties involved, which reduces helicopter hire costs but also serves to better coordinate fire breaks across a larger tract of country.”

Andrew said the timing for this year had been the trickiest part of the operation. Further south on the Cape controlled burning had begun earlier, but in the North the landscape had still been too wet.

“The window of opportunity was tight, as we had a later wet season this year,” Andrew said. “But the outcomes were pretty good. We got it done. Unfortunately, though, there were some frustrations over deliberately lit fires later in the season, which is a recurring problem for the Cape.

“Late fires are hotter and more dangerous, more damaging to the environment, and are bloody hard, hot work to fight on the ground.”

One of the big successes during the season was the Regional Fire Planning meeting held at Moreton Telegraph Station in early July, coordinated by Cape York NRM.

About 25 stakeholders including pastoralists, representatives from Queensland Parks and Wildlife, Piccaninny Plains Nature Refuge, the Steve Irwin Wildlife Reserve Nature Refuge, several Indigenous groups and Rio Tinto, met with Cape York NRM staff, Firescape Science and consultants Darryl Killen and Lana Polglase to discuss their fire management plans for early prescribed burns on the northern Cape.

“It was a really good turn-out. The meeting brought the different stakeholders together to discuss their fire plans and to pool their resources ... To make it more cost-effective, bigger bang for the buck,” Andrew said.

“It really helped align our aerial burning operations with those of adjoining stakeholders (reserves, Land Trusts, and other stations).”

The burns are discussed and mapped out, then a helicopter is employed to do the work. Incendiaries are then allocated across the participating properties.

This cooperation between landholders helped reduce helicopter hire costs and provided a more holistic planning method to coordinate fire breaks across a larger tract of land.

Stakeholders were also more in tune with neighbours and hence more vigilant in looking out for arson attempts, which ultimately led to better enforcement results.

“Certainly we need more awareness out there about arson, and more collaboration like the Moreton meeting can only help reduce the damage from these wildfires,” Andrew added.

The Regional Fire Planning Project is funded by the Australian Government’s Reef Trust and National Landcare Program.

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FIXING GULLIES AND GAINING SKILLS

More than \$1.3 million has been awarded to Cape York Natural Resource Management to coordinate gully remediation in the Normanby catchment area.

Restoring eroded gullies and providing skills development and job opportunities for First Nations people will be the focus of a new project to be carried out on Normanby and Melsonby Stations.

The funding, announced in November by the State Government's Environment Minister Meaghan Scanlon, comes under the Reef Assist 2.0 program which will also improve water quality by reducing sediment and nutrient loads in runoff to the Great Barrier Reef.

“This is a fantastic opportunity to extend the work we have been doing with the Normanby Station crew,” Cape York NRM’s Sustainable Industries and Water Quality Manager Michael Goddard said.

“Gully erosion remediation has proved to be a great success in terms of reducing the amount of sediment that runs into the Reef, and we have a proven track record in assisting Indigenous trainees obtain their heavy machinery tickets and increase land management knowledge.”

The Cape York Gully Remediation and Creation of Indigenous Employment Pathways Project will run over two years with delivery of training carried out on-country in partnership with the Normanby Aboriginal Corporation, MAC Training Solutions, Neilly Group Engineering and R N L Contracting.

“Erosion sites on Normanby and Melsonby Station will be remediated during training events and project participants can gain valuable Level 1 Machine Operator accreditation,” Michael said.

The gully work will involve headcut stabilisation, through construction of rock chutes and diversion banks. This will be followed by revegetation of the sites' native grasses.

“As well as machinery training on-site, we will also be providing support for participants to create resumes and cover letters for job applications, and incorporating cultural heritage development through Indigenous mentoring and cultural land management practices, such as cultural burning.”

The project is funded under the Queensland Government's \$33.5 million Reef Assist 2.0 Program, through the Queensland Reef Water Quality Program.

To review the Minister's statement visit this link www.statements.qld.gov.au/statements/96621



Images: Before and after photos of remediation works carried out at the Clayhole gully site at Normanby Station.

SOILS PROVIDING ANSWERS FOR ENDEAVOUR FARMERS

Clay, sandy, overly porous, muddy, crumbly - clues on the soils around the Endeavour Valley have led to the start of some pioneering management practices under a project to assist farmers in the region.

Four demonstration sites set up in the Endeavour Valley catchment of Cape York Peninsula are teaching farmers about soil testing and how this can improve efficiency and production.

The Smart Farms Small Grants project set up by Cape York NRM and the Endeavour Productivity Network involves soil and tissue testing, on-ground activities, field days and workshops. It is funded from the National Landcare Program's Smart Farms Small Grants - Soil Extension Activities.

"There has been quite a bit of progress," Consultant Agronomist Dr David Hall said. "All sites have been established, all baseline data has been established for the case studies, and we're resolving some issues and changing practice in this first year. It's quite pioneering in a way."

The four demonstration sites are case studies for managing soils and soil constraints and the results are shared with other farmers in the region.

"They have all been great people to work with, very eager to adopt, learn, listen and improve. I think they definitely see the value and the merit in what we're doing," David said.

Cape York NRM Sustainable Industries Officer Natalie James is managing the Project, planning site visits, liaising with property owners, assisting in the soils testing and collating information gathered for reporting and distribution across the region.

"I am so pleased to be working with this group, they are such great advocates of what they're doing," she said. "We're seeing more people taking notice of what (the demonstration sites) are doing and coming out of the woodwork. It'll be great to see more people involved as we'll be holding more workshops this coming year."

One of the really positive elements to the Project was the access to information and products, she added.

"Further south, farmers have so many more resources; you have reps knocking on farmers' doors offering free product trials, workshops and field days, there is so much on offer.

"This group of farmers have little because of geographic location, there's not a lot of industry support or high industry traffic. So we're bringing it to them."

Each property has different needs, and work in this first year of the two-year Project has shown promising results - from reduction in water and fertiliser inputs, to higher yields and healthier fruits.

At site 1, a fertigation system has been introduced to pump nutrients through irrigation. The pump is solar-powered and has already saved about 20 percent in nutrient feed since operation.

"I don't think anyone in the area has done (solar-powered fertigation) before," David said.

"This is a system where (the landowner) will be able to do the whole farm in sections, save on fertiliser and manage requirements of the plants a lot better.

"It's a more fine-tuned system of applying nutrients as and when plants need them, not all at once by hand on the surface. The irrigation is applying the nutrients in the soil where the plant needs it. It's also best practice management for fertilisers in terms of water quality - you're less likely to get nutrient run-off."

At site 2, the case study was looking at general soil health and practice and already, the property has reduced its water usage by a third.

"That is a big thing," David said. "We've established there were some limiting factors that needed to be addressed."

The passionfruit farm producers had applied hay mulch to the vines, which had retained too much moisture, the soil was muddy and the propensity for disease build-up was high. Later in the season the canopy had become too thick, which was holding up the fruit.

The site is also trialling new treatments, such as a calcium-only product, to see if it is suitable for the region and increases fruit production (replacing calcium nitrate as nitrogen creates more foliage).

"We just want the fruit," David said.

By removing the hay, using a lighter mulch and cutting back on watering and reducing nitrogen inputs, already the plants were "looking better" with less canopy and more fruit, David said.

"It's lots of little things that when altered, add up to good results," he said. "Passionfruit is very susceptible to disease, so (the landowners) are preparing another area so they can rotate their crops and spell the land."

Site 3 was facing challenges with disease build-up in the soil. The property had three blocks which had been harvested for many years. Soil testing and plant tissue samples were taken.

"Block A was the worst offender, with plants lost due to disease in the soil," David said.

"But in a lot of cases disease was the symptom and not the cause of their plant loss. Their soil type was heavier black clay so there were underlying drainage issues due to subsoil constraints - the soil was getting waterlogged and the root systems could drown, basically. So we have been addressing that."

The landowners were provided with different products to help their fertiliser program, soil microbial health, and tailor the nutrient demands.

"We've also changed blocks and are resting another block. We're managing it very differently. So that's good.

"Certainly at this site they've had the best yield they've ever had this year and while there have been plant losses, it's nowhere near what it was. It could be a coincidence, so we need time to monitor the progress."

From passionfruit to dragonfruit, Site 4 held its own challenges. The soil was very porous, and, because dragonfruit plants have shallow root systems, water wasn't staying long enough in the soil for the plant's demands, in particular, in the hotter months.

"We're making baby steps," David said. "The soil was different again. So they have changed their irrigation system.

"Also, the problem with dragonfruit is there's no real data out there for Australia at all as far as the baseline level for growing dragonfruit in soils. Same with the plant tissue testing; we're establishing our own. Because dragonfruits don't have leaves in the common sense of the word, we can't get a leaf sample, so we're getting actual fruits analysed for each of their nutritional values.

"This has put us a bit behind, because we're just establishing what we think is the data we need to work out the best soil levels, using our joint heads to find out how we can get good-sized, good-quality fruit. That's the intention."

Overall, David said the Project has delivered so far, with all sites showing real progress.

"I think we're doing well," he said. "Next year's going to be great, we've already scheduled our visits."

Nat added that because they were working with small-scale properties it was a case of "really learning by doing in this Project".

"So we're trialling a whole lot of different things in one hit to tackle a lot of different issues. Next year will still be about introducing new things and seeing what changes develop."



A soils guide booklet was produced in December for distribution to landholders in the region. Data being collected will contribute to a national database under the National Soil Strategy.

The Smart Farms Small Grants: Soil Extension Activities Project, is being coordinated by Cape York NRM through funding from the Australian Government's National Landcare Program.



PROJECT IN PICTURES

9,600KM FIELD TRIP TO MEASURE CHANGES TO VEGETATION

Remote, dusty, warm and - unusually - foggy and cold. A 9,600km field trip to measure changes to vegetation across the Cape was beautiful, challenging and a necessary undertaking on behalf of the Federal and Queensland Government and landholders to assess the health of the region.

The Cape York Land Condition Monitoring project carried out by Cape York NRM's Geographical Information Systems specialist Lars Kazmeier and botanist Dr James Hill, required driving to 116 sites across the Cape recording pasture condition and woody thickening (density increase of woody plants).

The work took 27 days broken into four trips along main and secondary roads, with stops every 20km to assess the established monitoring sites.

The data gathered is a useful snapshot of land condition. It provides information to land managers, for example, about the proportion and health of annual and perennial grasses, and what action could be implemented to improve pastures. It could also be used as a guidance tool for NRM project development.

This project is supported by Cape York NRM through funding from the Australian Government's National Landcare Program.





CAP'S OFF TO REEF PROJECT

From designing a campaign to secure an electric-car power charging station, to supporting a monthly farmers market - these are just some of the ideas being discussed through a new series of workshops under the Community Action Project (CAP) for the southern Cape York region.

A recent workshop in Cooktown reviewed funding options and existing projects that could be rolled out over the coming year, as well as brainstorming some new concepts, which could do their part in protecting the Great Barrier Reef.

“The CAP program was developed in 2020 with Cape York NRM and South Cape York Catchments to get the community together to talk about the Reef, what the concerns were and what we could do about it,” Cape York NRM Grazing and Water Quality Project Officer Harry James said.

“The main issues were seen as climate change, tourism and increased recreational pressures. So out of that came the Cape York Reef Community Action Plan. This outlined about 13 strategies for community action.”

Already the CAP has delivered beach clean-ups, school field trips, turtle nesting protection activities and a cultural heritage protection project.

“The community really came together to share their priorities and came up with some amazing ideas,” Harry said.

“So this latest workshop reviewed what has been achieved and how we can support and secure funding to continue these other projects, and also to look ahead at where else we can put new community ideas and energy to good use.”

A key tenet for CAP is to engage with young people, which is where partners South Cape York

Catchments (SCYC) takes a lead. It has created a Youth Ambassador program to help channel the passion of the region's younger generation.

SCYC is a natural and cultural resource management group that supports three full-time ranger programs as well as community projects and events in the southern Cape region.

Program manager Jessie Price said the Youth Ambassador program was essentially tapping into the many young people in Cooktown and the region who live and breathe the environment but don't have access to, or knowledge of, the many career avenues taken for granted in the south.

“Cape York produces a lot of really fantastic kids that have got a lot of practical knowledge because they are growing up out on the Reef, they're using

boats, they're seeing things, they're recognising things without any sort of formal training or education. So this project will link some of those skills with people who can help them to apply the knowledge to make careers out of what they just know from growing up here,” she said.

“SCYC is forming a bridge between the Cooktown kids that are interested and passionate about this stuff, and the professionals and the agencies and departments that can guide them, such as the Great Barrier Reef Marine Park Authority, the Australian Institute of Marine Science, as well as our local Queensland Parks and Wildlife rangers and local organisations like Cape York Water Partnership, Cape York NRM and then also Traditional Owner ranger groups and organisations.”



The Youth Ambassador program connects young Reef leaders to mentors, coordinates catchment field trips and is planning on taking the leaders on a live-aboard trip on the Great Barrier Reef.

“They will see what opportunities are out there for careers in this industry and work to protect this area they call home. They can also share their knowledge with other young people through organised CAP activities.”

CAP youth ambassador in Cooktown Sienna Thomason agrees the project is a great way to meet like-minded people.

She connected with CAP by doing a bit of volunteer work with SCYC.

“To me it’s just a great opportunity to be able to get involved and get other youth like myself involved

in community projects to do with the Reef,” she said.

“After I graduate I want to go to university and get a marine science degree and then end up back in Cooktown researching the Reef and marine life around here.”

Her message to everyone is: “no matter how small a change you think you’re making, in the long run it really is a big change if everyone gets in and has a go.”

Further north of Cooktown, the CAP has assisted the Binthi Land Holding Group Aboriginal Corporation (BLHGAC) with its application for National Heritage listing.

The Binthi Country has significant wetlands, lakes and waterways which need protection and

management to reduce sediment runoff, which ultimately finds its way into the Great Barrier Reef.

“We’re very grateful to CAP for helping us to progress,” BLHGAC coordinator Ramona McIvor said.

“We’ve been wanting to do (heritage listing) for many years and it’s such a good opportunity to get our Country on the map and the recognition it deserves. It’s very sacred to us and a very special area.”

Binthi is carrying out fencing work to protect specific cultural areas from feral animals, as well as training young Indigenous people to manage the land and protect the culture of the area. (Story on pages 20-23)

Cape York NRM is assisting with the logistics of the

fencing, and will continue to support the Heritage Listing application as it moves forward.

“What I think is really cool about this CAP process is that it’s really grassroots,” Harry concluded.

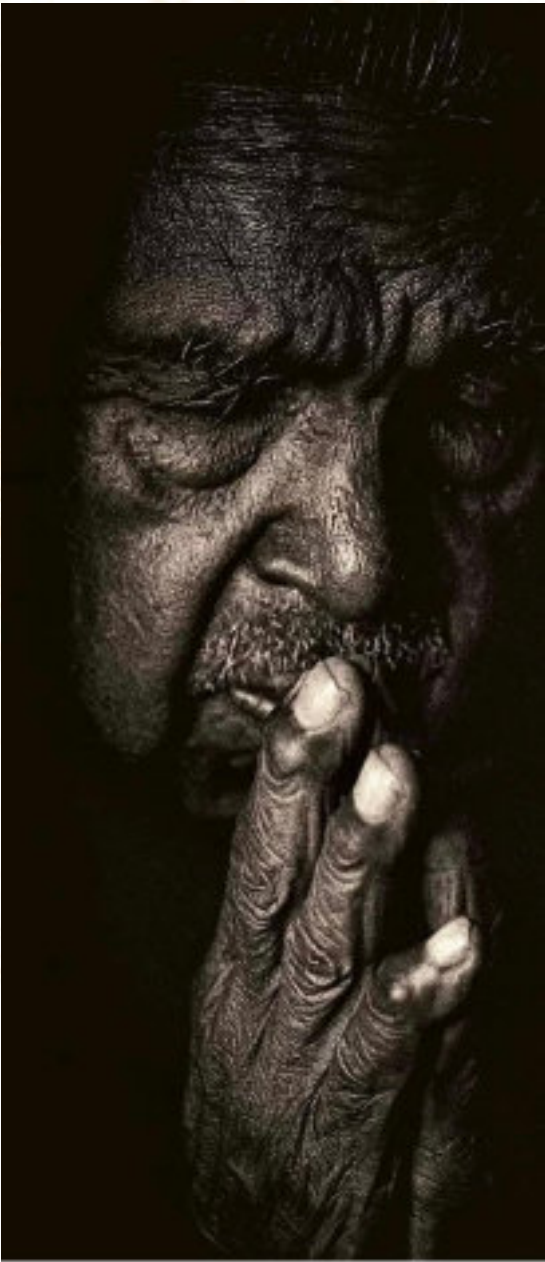
“It’s led by the community, it’s been built from the ground up and is therefore really meaningful for the people here, who know this region really well.”

The Community Action Project is supported by the partnership between the Australian Government’s Reef Trust and the Great Barrier Reef Foundation



VALE BISHOP ARTHUR MALCOLM

A LIFE OF TRADITION, ADVENTURE AND RECONCILIATION



His mother Lilly was a Kunjun Olkola woman and father William John was a Kokoberra man. Lilly was taken, along with her three children from their home in Cape York and sent to Yarrabah. William was sent to Yarrabah as punishment for removal of a beast from his traditional lands. They met and married soon after they arrived, and in 1934, Alistair Arthur Malcolm was born, the youngest of their five children.

As a boy, Arthur, as he was known, lived in a dormitory at Yarrabah, where he received schooling and church teachings, and carried out his chores.

But he also learnt traditional skills from his father, who was a respected hunter and sea man. Arthur was just seven when his father died. When Lilly remarried Big Kobo from the Lockhart River area, Arthur had another teacher who showed him the traditional ways. He became a proficient provider for his family, and dreamed of having great adventures when he grew up.

Despite humble and restricted beginnings, the late Bishop Arthur Malcolm - Australia's first Aboriginal Anglican Bishop - was a pioneer for reconciliation, well before the word became part of the national debate about how to right wrongs of the past.

Some 2000 people mourned his passing in Yarrabah in late July this year, and over 10,000 people viewed the funeral online from many parts of the country and around the world, which included a moving eulogy delivered by the Anglican Archbishop of Melbourne Philip Freier.

The Archbishop had known Bishop Arthur since he himself had been a young visiting teacher to Yarrabah.

He told the gathering that Bishop Arthur was proud of his Aboriginal heritage and believed everyone should have the right to be who they are. He saw himself simply as a man equal to everyone else, and was comfortable in himself.

As a young man, Arthur tried his hand at a number of jobs, from kitchen hand to logging and bridge construction, but it was to the Church he eventually turned.

He attended the Church Army College in Newcastle where he embraced community life, and was

known for his athleticism and active participation in community events.

He took part in sports such as tennis, golf, football (his passion), cricket, billiards, darts and tennis. He helped with fencing, mulesing, timber cutting, fire fighting and loved to mix with anyone, always asked "who you are, where you from," and always found a connection, Archbishop Freier said.

At 27 he met Coleen at College and after a long courtship, married in 1965 in Sydney. They continued in the Church Army and Bush Brotherhood in Victoria and New South Wales while raising their two children, Andrew and Ruth.

They would often return to Yarrabah for family visits.

In 1974 Bishop Arthur was asked by St Aubins in Yarrabah to return as chaplain. He was ordained as a priest in 1978 and consecrated as a bishop in 1985, the first Indigenous Anglican bishop in the nation.

It was a time of political change across the country, with the voice of Aboriginal and Torres Strait Islanders being heard, the stories of the stolen generation emerging, and self reflection and reconciliation growing.

Bishop Arthur was seen as a uniting force for Indigenous people and he would travel the country with Coleen, and internationally,

preaching and speaking on behalf of his people.

He was foundation chair of the Aboriginal and Islander Ecumenical Commission of the National Council of Churches in Australia, and chaired the National Aboriginal and Torres Strait Islander Anglican Council. He was also involved in international ministry as a member of the Anglican Indigenous Network of the Anglican Communion.

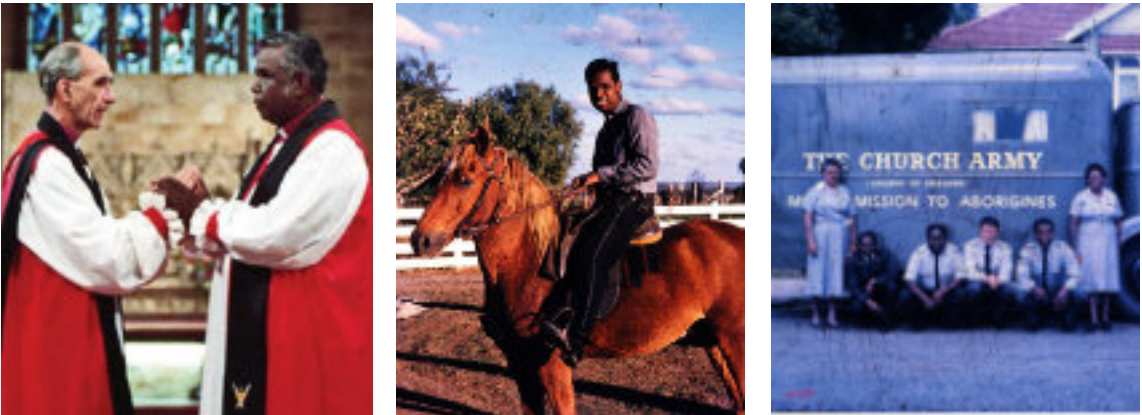
In 1995, Arthur and Coleen wrote a Prayer for Reconciliation, which is now published in the prayer book for Australia. In 2005 he was appointed an Officer of the Order of Australia for "service to the community through the Anglican Church in Australia".

In later years, he would still advise and support his community after he retired, continued his love of fishing, was patron of the Yarrabah footy club (managing to watch a game in the last month of his life) and was a beloved Elder of Yarrabah.

True to his childhood self, he lived a life of many adventures.

He is survived by his wife, Coleen, their children, Andrew and Ruth, and grandchildren.

Bishop Arthur Malcolm 1934 - 29 July 2022.



All images have been provided with permission from the family.

TIME AND TRAVEL ALL MAPPED OUT

PENINSULA DEVELOPMENTAL ROAD

It's a constant question among people travelling around the Cape: "How long did it take to get from A to B? Much dirt?"

And the answers are regularly changing as more and more of the Peninsula Developmental Road (or PDR to most) is covered in bitumen.

Which is why Cape York NRM's Geographical Information Systems (GIS) specialist Lars Kazmeier decided to update the information.

Lars travelled the Cape as part of a Land Condition Monitoring project, and together with PhD botanist Dr James Hill, drove for a collective 27 days (with a couple of breaks in between) recording pasture condition and woody thickening at 116 specific sites on the peninsula.

While he was travelling he mapped the sections of dirt and sealed road of what he calls the "spine", which is the 571 km PDR which goes from Laura to Weipa. He admitted, with a wry smile, he couldn't help himself - he loves maps.

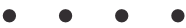
"Before, people on the Cape knew their distances, like from Coen to Laura, and they were pretty set times. That has completely changed because of the bitumen, it's so much quicker," he said.

"I've crunched the numbers and have created a map that will help our staff to plan their trips with more accurate timing."

Lars said as more parts of the PDR were sealed, it would be even faster to get from one place to another, so he would continue to update the map as the changes unfolded.

The sealing of the PDR is a part of a \$276 million program of works jointly funded by the Australian and Queensland Governments to upgrade critical infrastructure on Cape York Peninsula.

To find out more on the road development go to www.tmr.qld.gov.au/projects/cape-york-region-package.



JUNGLE CREEK EXPANDS ITS PROTECTION

Station owners working hard to ensure property’s natural values remain unscathed.

Ecologically sensitive areas at Jungle Creek Station are being given further protection through a project to install more fencelines and new offstream watering points for cattle.

With support from Cape York NRM, Station owners Garry and Lee-Ann Stonehouse wanted to extend protection of the natural values of their property and improve grazing practices.

Over the past three months they have installed fencing around Fern Gully - a permanent spring on the eastern boundary of the property. This

restricts access to 20 ha, which covers the entire spring.

They are also installing fencing along the riparian wetland areas of Bull Creek, which contain valuable habitat for palms and other wetland plants.

The wetlands are highly prone to erosion and easily damaged by cattle, so they have laid additional poly pipe along existing lines from the house dam and installed a new watering point away from the wetlands.

“We’ve worked with Garry and Lee-Ann on similar projects at Jungle Creek and this builds on the great work already achieved in protecting the important springs and floodplains on the Station,”

Cape York NRM Coastal Ecosystems Coordinator David Preece said.

“They are keen to preserve all of the riparian wetland areas and restrict livestock access by providing alternative watering points in more resilient country. It will also improve grazing land management capacity at the station.”

Jungle Creek Station is situated on the headwaters of the Hann River, which is part of the Normanby catchment. It drains into Princess Charlotte Bay and the Great Barrier Reef.

The owners are also implementing rotational grazing and wet season pasture spelling to help increase ground cover, which in turn minimises potential for hillslope erosion.

“By protecting the wetlands and springs and preventing erosion, you are reducing potential sediment run-off from the property to the GBR. It’s a win-win situation,” David said.

The owners are also implementing rotational grazing and wet season pasture spelling to help increase ground cover, which in turn minimises potential for hillslope erosion.

This project is supported by Cape York NRM, through funding from the Australian Government’s Reef Trust.



INQUISITIVE MINDS REAP REWARDS

Events, awards and field trips have been the focus of our school engagement on Cape York Peninsula.

Students from Cooktown State High School, Western Cape College and Northern Peninsula Area State College were singled out for their commitment to the study of, and support for, the environment when they received Cape York Natural Resource Management Environment and Conservation Awards.

In their eighth year, the awards are aimed at supporting students who have studied the environment, have been involved in community land care work, and who have an interest in pursuing a career in the field after graduation.

Sienna Thomason from Cooktown State School received a laptop, which was presented to her by Cook Shire Councillor and Cape York NRM Director Marilyn Morris, at the school's presentation night on November 16.

"The Cape York Peninsula needs students like Sienna who take an interest in the health and welfare of the Cape York Peninsula," Marilyn said.

"Cape York NRM continues to engage with young people and ignite their passion to preserve and protect this amazing region."

Further west on the Cape, a very happy Tahu Loban was the recipient of the Cape York NRM Conservation and Land Management Award, which he received at the Western Cape College Presentation night in Weipa on November 15.

In Bamaga, an enthusiastic Jacynta Ahwang from the Northern Peninsula Area State College also received the Conservation award.

Jacynta, a young Kaurareg, Gudang/Yadhaykenu woman was nominated for this award for her dedication to science and making a difference. Her teachers believe she will be a future leader who is capable of pursuing studies which will enable her to work in any career that supports her people's land and sea management in Cape York.

Overall it has been a busy six months for Cape York NRM staff as they spread the word on all things Natural Resource Management to students, schools and even our seniors community.

Sustainable Industries Officer Natalie James and Grazing and Water Quality Project Officer Harry James held a number of water quality field trips with students from Cooktown State High, as well as a group of homeschooled students from the region, taking them out to Isabella Falls to show

them how to test water quality, and discuss the impacts it has on our inland waterways, wetlands and the Great Barrier Reef.

They also attended the Cooktown Careers Expo to provide advice on careers in the Natural Resource Management sector to curious students..

Biodiversity Officer James Dobson hosted a workshop for students at Holy Spirit college to discuss the work we do with Ranger Groups on Cape York Peninsula.

"Many of the students are the potential future Traditional Owner rangers with whom we partner, and come from Hopevale, Groote Eylandt, Aurukun, Lockhart River, Cairns, Kuranda, Innisfail and Pompuraaw," James said.

"I gave a presentation on the projects we run and the areas we cover, such as fire, feral animal management, weed spraying, surveys, threatened species protection, etc, and Harry joined us to discuss gully erosion remediation and water quality."

James also borrowed an ant plant from the Cooktown Botanical Gardens which was part of a Cook Shire ant plant relocation project to the Gardens earlier in the year.

"It was really helpful in demonstrating the range of species we are trying to protect, and why, and the Cook Shire's relocation work was a great example of how progress can also be environmentally friendly."

Two of our newest staff members to Cape York NRM, Project Officer Ben Ansell and Administration Assistant Starrlia Colley, were put to the test when they represented us at the Seniors Big Day Out event in Cooktown. They set up a colourful stall, swapped stories about the environment with many seniors, and took part in a number of activities - even learning a few dance moves along the way.

Coastal Ecosystems Coordinator Dave Preece and the communications team of Monique Bell and Andree Stephens headed over to Weipa to take part in the Western Cape College Careers Expo for two days of meeting with staff and students and presenting plenty of ideas (and merchandise) on what we do and how we do it.

"We really enjoy getting out and meeting young people, letting them know their options and seeing the real interest they have in improving our environment," Dave said. "They are our future land managers."



CAPE CHARACTER

SIMONE RODRIGUEZ

It was meant to be a year-long stay, but 14 years on, Simone Rodriguez, lives and breathes the small village of Seisia, on the tip of Cape York Peninsula.

Owner of the popular Free Bird Arts & Crafts Cafe found at the Seisia Holiday Park, she is a fixture in the community, her generous smile and gentle, sing-song Brazilian accent is as much a drawcard as the incredible coffee she serves to her many customers.

“My plan was to stay for one year here, then I extended two more years, and, of course in this meantime I fell in love for this area, because it is a fascinating area, fascinating people,” she said. “And it’s like a challenge and you have a lot to learn, too, about the peoples and about yourself.”

Born and raised in a small rural town in central Brazil, remote living was not unfamiliar to Simone. It was a cattle and coffee farming region, with rivers, not oceans. It was set in its ways, “old-fashioned”, and time went slowly, she said.

She visits her family often, but it is not her home. “Seisia is my home”.

She first travelled to Australia and settled in Cairns, where she worked for three years as a food supplier, providing bases for chefs, and traditional foods. She then applied for work with the Seisia Indigenous Enterprise.

“I had no knowledge of this area,” she said, but relished the chance to explore further north.

She worked in the health food sector, helping in catering and providing healthy options for the community. And she was hooked. She applied for a permanent visa, and with support from the Immigration Council, was given her status at a ceremony organised by Seisia Council.

“It was so nice, so emotional, a beautiful ceremony.”

For Simone, Seisia represents a simple, honest way of life.

“You learn about what has real value here. You just need the basics.

“The kids are still like kids. Mobile phones, no, or stay in house on computers, you see kids on the beach, a lot of fishing, they start as babies. They’re much better than me and they are very generous people. If you don’t catch a fish at the wharf they always give me a fish,” she said laughing. “They care about one another, a very real neighbourhood, everyone knows everyone, physical, face-to-face contact.”

Simone also loves the traditional ways of the Elders.

“They are are still trying to keep traditions, it’s amazing - ceremonies, celebrating what is important to them. When you talk to Elders here you are fascinated, there’s a lot of respect for them here.”

The community also has a strong health system

and hospital, and business development support. Simone herself has, over the years, become more engaged with community services, and is active in organising activities for aged care and mental health services.

“There’s a lot of nice professional people here. Always some workshops to give more support to people and make life better.

“Of course, like other places here, this last two years the economy has been not a very nice balance, but no one complain ... they don’t think about the world too much, no, let’s go fishing.”

This tourist season, however, came out of the COVID grip.

“This season has been crazy, everybody so happy, the tourists so happy, wanting to know about the locals.”

Simone’s cafe has a continuous stream of visitors as word of mouth and the internet recommend a must-see rating for Free Bird. She also receives notes and cards from travellers, which she keeps in a memento box. Her coffee is one of many highlights.

“Good coffee, is not secret,” she smiled. “The best thing for food and coffee it’s about how you prepare and a good feeling to serve someone else. If you’re happy about what you’re doing, you make the best.”

Her eclectic array of arts and crafts also get a big tick from Tripadvisor followers - although she admits she doesn’t do computers. Or indeed time keepers.

“I take off the watch - TI time is much better - and walk on the beach. Free bird, that’s me.”

She is looking forward to the wet season, when it will ease back into quiet.

“It is the time to stop, going slow and you look around and have the time to breathe. The environment changes, so quiet, no noise. It’s incredible, the colours, beautiful colours, everything comes to life, and the birds,” She tailed off, thoughtfully.

“You find the time to hear your mind, to feel very small when you look around in this huge area.

You can walk forever.”

The wet season is also when she can make trips overseas, sometimes to family in Brazil, sometimes to the large European cities, or Japan, but despite their huge histories and monuments, they are not as “huge” as Seisia and the surroundings.

“No one place compares, makes me feel what I feel when I am here. I feel I’m back home. I feel I’ve been adopted here.”

“When you are walking around here, the size is different... I live here many years, but still a lot of places to explore, you need to go out, to the gorges, Usher point ... paradise is here in Cape York.”



ABOUT SEISIA AND BAMAGA

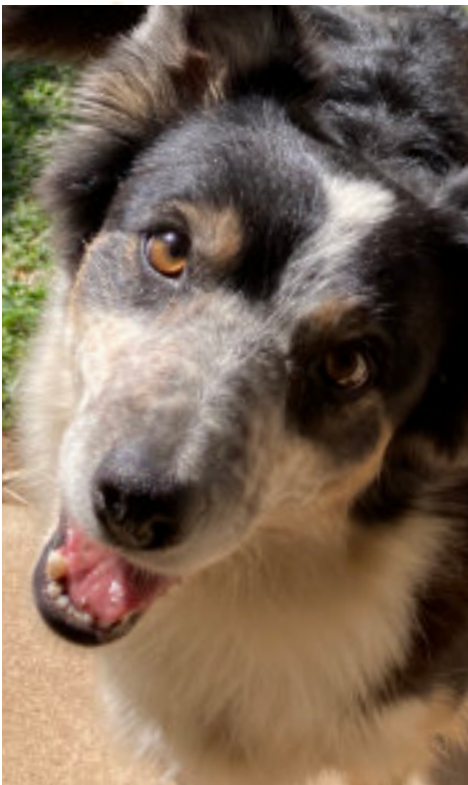
The people of Seisia and Bamaga originated from Saibai Island, 8km south of Papua New Guinea.

After WWII they were granted lands on the mainland of Australia, when it was clear the island could not sustain them into the future.

They settled at a temporary site at Muttee Heads, where the Department of Native Affairs (D.N.A.) set up a medical post, store and a temporary church. As more families arrived, they used old army huts from the war and any building materials to build homes and a school.

Land inland of Red Island was chosen as the official site for settlement, and was named Bamaga, after Saibai Island Chief Bamaga.

Some families, lead by Mr Mugai Elu, preferred to remain on the coast and stayed at Muttee Heads. They were allowed to change the name of their village to SEISIA - which was formed by taking the first letter of the names of Mr Mugai Elu's father and brothers:- Sagaukaz, Elu, Isua, Sunai, Ibuai, Aken, - pronounced Say-Sea-A.



CAPE CANINES

A human's best friend, as the saying goes, has never been more true when it comes to pups living on Cape York Peninsula. Dogs on cattle farms, dragonfruit farms, riding shotgun on a four-wheeler, cooling down in a nearby water trough or the new pups starting out and learning the ways of life on the land – Cape York pups certainly are loved and living the dream.

Cape York NRM Project Officers can't help but snap a few pics when they are out in field. Here are some of our favourites.

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MEET

NATALIE JAMES

Don't be fooled by our Sustainable Industries Officer Natalie James' diminutive stature. She beats about the bush with the best of them and her wide engaging smile is becoming well known among graziers and agriculturalists on Cape York Peninsula.

If she's not sampling water in remote catchment waterways, she's meeting with growers, holding information forums for graziers, travelling across the Cape gathering feedback and research from landholders, running information talks with school kids, or diggings samples for soil research to improve agriculture outcomes for producers.

We love Nat, and we think you will too.

What's your background, where do you hail from?

I grew up in Brisbane and studied a Bachelor of Environmental Management at the University of Queensland. After university I spent a few months interning in Fiji working in a fisheries management space. Upon returning I picked up a job as an Irrigation Extension Officer in Mildura and spent a lovely year living on the Murray before moving to Cooktown.

How did you come to work with Cape York NRM?

After a year working in irrigation (and near freezing to death while being locked down in

Mildura for six months) I knew that irrigation was not my passion area. I was looking for a role that was more diverse and combined skills I'd picked up working in the horticultural industry but was more aligned with my degree. The Sustainable Industries Officer position came up and I thought I fitted the bill. (I was also looking to move to North Queensland so I could live closer to my now husband).

What are some of the key jobs you carry out?

I deliver a few projects that mean I cover almost all the Cape with different parts of the job—grazing projects in western catchments, water quality and the Paddock to Reef program in south-eastern Cape York and a soil health project in the Endeavour Valley. There are a lot of different tasks associated with this, it could be organising an event, collecting soil or water samples, doing a land or vegetation condition assessment, doing property or project plans with land managers. This list goes on.

What's your favourite job?

Strangely enough I've started to really enjoy the monitoring and evaluation side of the role. But you can't go past going to catch up with landholders anywhere on the Cape.

What is it that you love about the Cape?

The weather, landscape, land managers (and underwater hockey).

Any pet hates?

When my fingernails get too long or when the floors are gritty.

How is the Cape and its communities travelling for the future?

The Cape is changing a lot, but having met all the people I've met so far I know how resilient everyone is and how invested they are in their communities and the landscapes that they manage. I think Cape York has so much to offer and new opportunities for all industries and communities are becoming more available. I hope that the region and its people thrive into the future.

What will you be doing in 10 years' time?

I was still in high school 10 years ago, so it seems impossible to know! It's a while away.



We know that grazing practices have a big impact on land condition as well as the beef business' bottom line. But how does it influence the abundance and diversity of wildlife across the grazing landscape? Using a combination of motion sensor cameras, bio-acoustic recording and ants as an indicator, the team at Gulf Savannah NRM is on a quest to find out. They are running trials on six cattle stations throughout the Etheridge shire, which will attempt to quantify biodiversity and its relationship to land management practices. **For more info visit www.gulfsavannahnrm.org**

● ●

Homes are being built for endangered northern quolls in Far North Queensland to entice them back to what was 'quoll country' in the days before cane toads. Northern quolls all but disappeared from savannah land after the arrival of cane toads, but researchers say the small populations that survived and live in patches of rocky country above savannah land, have learned to avoid eating them. Now dens are being built around the edges of hillsides at Australian Wildlife Conservancy's Brooklyn Wildlife Reserve, north of the Atherton Tablelands, to help increase quoll numbers and reconnect populations.

For more info visit www.terrain.org.au

● ●



At its AGM in October 2022, NRM Regions Queensland presented its Annual Report and financial statements. Introducing the report, NRM Regions Queensland Chair Julie Boyd said 2021-22 saw NRM Regions Queensland consolidate its position as the go-to organisation for the natural resource management sector. The Annual Report delves into the initiatives managed by NRM Regions Queensland in the last financial year, many of them with a focus on collaboration. That includes summaries from the sector's communities of practice, reports from the Paddock to Reef, SWIF and Regional Coordination and Evaluation Project

For more info visit www.nrmrq.org.au

● ●



Natural Resource Management (NRM) Regions Australia welcomes the confirmation, in the 2022 Federal Budget announcement, of ongoing allocation from the Natural Heritage Trust to environmental priorities and sustainable agriculture. This funding decision provides certainty to those who work in the Environment and Natural Resource Management (NRM) sector that the Government is committed to supporting an ongoing vital national program over the next five years as the current National Landcare Program comes to its end.

For more info visit www.nrmregionsaustralia.com.au

● ●

MESSAGE FROM OUR CHAIR

All of us at Cape York NRM are excited to see this second edition of LandsCAPE hit the newsstands. Thank you to our Comm's team for this outstanding production that brings to life the work of our team across the Cape York Peninsula plus news, issues, features and profiles. What a brilliant snapshot of our remarkable region!

While all the hard work you can read about here has been happening out on country, the Board has been busy with the process of Director nominations to fill Board vacancies. At the close of nominations on 9th September 2022 a total of seventeen applications had been received, showing outstanding community interest to serve on the Board of Cape York NRM. Our Independent Selection Panel then conducted interviews with eligible nominees with five new Directors being

recommended for appointment to the existing vacancies.

We are delighted to welcome Clifford Harrigan, Pip Schroor and Jim Turnour as new Directors on the Board team, with congratulations going to Hurriyet Babacan and Marilyn Morris who were re-elected for their second terms.

The Board of Cape York NRM has a truly diverse and skilled team that bring a wealth of experience and true passion for the Cape York Peninsula region and our community. Thank you all for stepping up to the job and I look forward to working together for a successful and rewarding 2023.

Sally Gray

OUR BOARD



SALLY GRAY
CHAIR

From freshwater and marine habitat conservation, outback biodiversity surveying, and wildlife documentary filmmaking to natural resource management, Sally Gray's work has taken her along the east coast of Australia to the US , Nepal and South Africa. Sal is now the Assistant Manager at the 170,000-hectare Piccaninny Plains Wildlife Sanctuary in the centre of the northern Cape York Peninsula where she is active in weed and fire management and feral animal control.



HURRIYET BABACAN
VICE CHAIR

Hurryiet is a passionate advocate for service to planet, people and environment. She has held senior roles as an academic, public servant, trainer and researcher, and is currently professor of economic and policy development at the University of Queensland with a focus on regional/rural economic development. Hurriyet has been recognised for her work through a number of awards including the Order of Australia (AM) in 2014; the Bi-Centenary Medal awarded by the Prime Minister; Telstra Business Women's Award; and the Multicultural Services Award presented by the Premier of Queensland. She is listed in the Australian Women's Archives in recognition of women leaders who have contributed to Australia.



MARILYN MORRIS
DIRECTOR

Marilyn Morris was born and raised outside Cooktown near Hope Vale where the family property was a pilot site for tropical pasture development in the early 1960s. It later turned to cattle breeding and fattening. Marilyn spent 25 years in remote Western Australia and regional Northern Territory working in aged care and local government community recreation before returning to Cooktown in 2016. She has two adult daughters and a grandson. In 2020, Marilyn began her first term as a local government councilor for Cook Shire.



PIP SCHROOR
DIRECTOR

Pip has lived and worked in Cape York Peninsula for more than 15 years and is passionate about the protection of both the environmental and the cultural values of Cape York Peninsula. Her career started with Queensland Parks and Wildlife working as a ranger and she was the first female Ranger in Charge at Kutini Payamu (Iron Range) National Park (CYPAL). Pip now works with the Torres Cape Indigenous Councils Alliance (TCICA) assessing resilience to disaster events, impacts of climate change and preparedness in long term regional resilience planning. Pip has a Bachelor of Applied Science in Environmental Resource Management.



JIM TURNOUR
DIRECTOR

Jim Turnour has worked in the Cape York Peninsula region for almost 30 years. He was a State Government Landcare and Property Management Planning Extension Officer in the 1990s, then a policy and media advisor, before becoming the Federal Member for Leichhardt between 2007 and 2010. For the past decade he has been working with First Nations peoples as a researcher and manager. He was the CEO of the Jabalbina Yalanji Aboriginal Corporation between 2014 and 2019 and is currently the General Manager of the Wuthathi Aboriginal Corporation. Jim has a PhD (Economics) from JCU and undergraduate degrees in Agricultural Science and Economics from UQ. He is an Adjunct Research Fellow with the Cairns Institute, James Cook University.



CLIFFORD HARRIGAN
DIRECTOR

Cliff is currently a Balnggarrawarra Ranger with South Cape York Catchments. He lives at Normanby Station and is a Director of Normanby Aboriginal Corporation. He has previously been the Mayor for Wujal Wujal Shire Council and a Director of Jabalbina Aboriginal Corporation. Cliff began his career as a health worker taking positions in Wujal Wujal, Kowanyama and Cooktown. He has worked also as Senior Ranger at Talaroo Station, Mt Surprise. He attained his Associate Diploma in Aboriginal Studies in Music from the University of Adelaide in 1994 and is a well-known member of the Black Image band.



PAULINE SMITH
DIRECTOR

Pauline is a local government Councillor at Mapoon Aboriginal Shire Council, where she has responsibility for various Portfolios, including: Land and Sea Program, DOGIT Trustee, Ely Coordinating Committee and Social Events. Prior to this Pauline worked for Mapoon Aboriginal Shire Council as the Finance Officer between 2007 and 2011. She also is a Director for Old Mapoon Aboriginal Corporation, and helped to establish the corporation. She has managed OMAC Indigenous Carbon Farming Initiative with the Mapoon Land and Sea.



Become a Member

Join us to make a difference

Do you want to help shape the future of Cape York Peninsula's incredible wildlife, landscape and waterways? Become a member of the Cape York Natural Resource Management not-for-profit organisation and join us in working with all communities to protect and preserve this amazing region. Membership is free, and you receive monthly news bulletins about our projects, a sample bag of Cape York NRM merchandise, and a copy of our bi-annual LandsCAPE magazine.



Apply Today

PHOTO ESSAY

UNEARTHING THE SECRETS OF WINDMILL WAY

Archaeologist Professor Lynley Wallis, provides a fascinating insight into an archaeological dig being carried out in southeast Cape York Peninsula by Griffith University and other researchers working in partnership with the Laura Rangers.

From Brisbane to Cairns, from Cairns to Laura, we fly, then drive, reaching the final stretch to the small township on a road bitumised only two decades ago, to prevent dust destroying once vivid Aboriginal paintings at Split Rock, located a short distance outside Laura.

Split Rock is renown for its Indigenous art, and visitors can engage a guide from the nearby Quinkan and Regional Culture Centre to show them this cultural and historical area.

Split Rock is a great example of the kinds of amazing rock art that exists in the escarpment country around Laura. The site is part of the Quinkan Reserves, created in 1977 to protect this expansive sandstone country. This safety net was significantly expanded in 2018 when, after a 10-year struggle, parts of the region were inscribed on the National Heritage List. It includes a pastoral holding known as “Welcome Station”, which is our final destination.



The walking track and boardwalk at Split Rock.

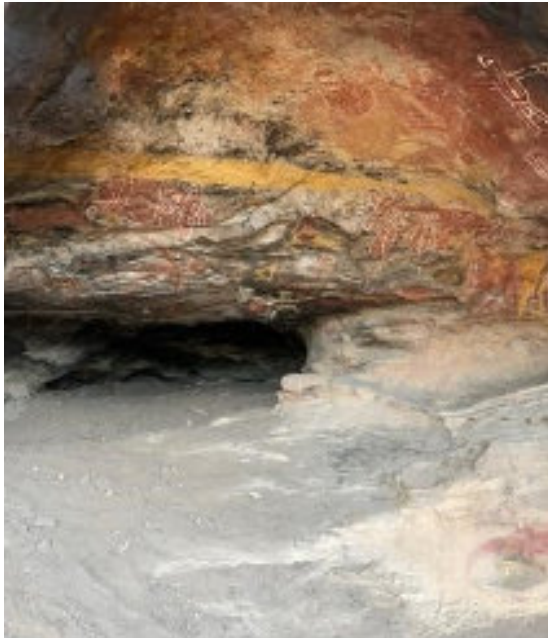
Heading north from Laura down a seldom used gravel road, we pass through the gate at Welcome, veering on to ever more infrequently used station tracks. Here, the annual wet season rains routinely wash out creek crossings and create new hazards. Fallen trees, fast darting wallabies, indignant cattle and the occasional bewildered Australian bustard provide additional threats to avoid.

We’re accompanied on our journey by Senior Laura Ranger Christine (“Chrissy”) Musgrave. Chrissy has been looking after country for decades, following in the footsteps of her father, a highly regarded Kuku Thaypan man whose expertise was recognised by an honorary doctorate from James Cook University in 2005. Starting as a guide, she has been with the small but tenacious Laura Rangers for many years, while raising her own family and maintaining cultural practices, and also serving as a Board member of Ang-Gnarra Aboriginal Corporation. Chrissy knows this country intimately, and feels a great responsibility for everyone visiting and working on it.



Senior Laura Ranger and Traditional Owner, Chrissy Musgrave.

Chrissy is taking us by 4WD to a remote rock art site known as “Windmill Way”, picking out the best way to reach this remarkable place. It has always been known to local Indigenous people, even after they had been moved off country to live in a fringe camp outside Laura traditional owners remained aware of it. Vivid images of their ancestors are painted there, some still so bright they appeared to have been done yesterday. Spirit figures, people, flying big foxes, dilly bags, kangaroos and even a pig — the latter attesting to the massive changes that were wrought in the area when the Palmer River gold rush commenced in the late 1870s.



The Windmill Way rock art site.

A few days earlier some of the team had hiked in to Windmill Way, covering a distance of about 2 km across the soaring sandstone escarpment from a more easily accessible location. They had carried with them the bare minimum of equipment that would allow them to start to reveal Windmill Way’s archaeological secrets.



Team members hiking across the top of the escarpment into Windmill Way.

Winding her way carefully through the Cooktown ironwoods, across shallow sided creeks and rocky ground looking for a route suitable for a 4WD, Chrissy explains, “You can always find a way, you don’t need to knock down any trees, just go between them”. This concern to protect the environment is demonstrative of the Laura Rangers’ approach to land management: work with the country, leave things the way they are if you can, and do as little damage as possible.

In the early afternoon at Windmill Way the excavation team hears the throaty growl of a quad bike. They glimpse Chrissy and Laura Ranger Co-ordinator Sue Marsh pulling up at the base of the escarpment. “It’ll be slow going but you’ll be able to get a 4WD in now,” Chrissy announces to the palpable relief of the excavators, who weren’t looking forward to lugging their backpacks filled with finds back up and across the escarpment.

Professor Heather Burke emerges from the recesses of the rock shelter. Covered from head to toe in grey dust apart from a pristine white lower face previously covered by an N95 mask to filter the dusty air while she digs, she takes a few large gulps of fresh clean air and stretches her back. “Enjoy,” she says sardonically to Laura Ranger Cliff Callaghan, and ABM team members Mia Dardengo and Keeley Wood as she hands them two buckets filled with sediment.



Professor Heather Burke in the recesses of Windmill Way preparing to take out more sediment. The ceiling of this part of the shelter is less than 1 m in height, making working conditions cramped.

Sieving is a filthy task and just hard work. Senior Research Assistant Mia loves it: “It’s better than a day in the gym for core strength” she grins, covered even more heavily than Heather in dirt. The sediment is poured into silver metal sieves which, when shaken, leave behind the larger objects, amongst which are a treasure trove of artefacts; the things made, used or modified by the people who once occupied the site.

Cliff, Mia and Keeley peer eagerly into the sieves. “Aha,” Keeley exclaims joyously, “more string!” “This is why sieving is the best”, Cliff says. “We get the first real look at what’s coming out — we can ‘cherry pick’ the most exciting finds and make everyone else jealous!”



Sieving is a dirty job. Here Cliff Callaghan pours sediment into the metal sieves that Mia Dardengo is shaking to get rid of all the sediment, leaving behind the “finds”.



Chrissy Musgrave, Sue Marsh and Roseanne George sorting through the sieve residues as the dust from the sieving station billows around.

The sieve residues are then handed over to the sorting team, today comprising myself and graduate student Gabriella McLay, joined by Chrissy and Sue, Laura Ranger Sam Lowdown and Traditional Owner Roseanne George. Roseanne is the daughter of another highly respected elder, also awarded an honorary doctorate from JCU for his cultural heritage work. Like Chrissy, Roseanne has lived and worked on the country around Laura for her entire life, and delights in spending time where her Old People once lived.

Team members pour the finds on to trays and then sort them into categories. Stone artefacts, string, bone points, wooden points, burnt bone, charcoal, mussel shells, ochre—every tray brings with it more finds that will eventually be individually catalogued and studied in detail to learn more about how Aboriginal people lived here in the past.



Laura Ranger Sam Lowdown sorting the sieve residues from Windmill Way.

Sam peers quizzically at an object pulled from her latest tray. It’s a macropod incisor, a bright white shiny find amongst the otherwise dusty objects. “It’s not right,” she starts to say as comprehension dawns and a huge grin breaks out on her usually serious face. “It’s wax!” she exclaims loudly. “Look!” She hands the find over to Chrissy and Roseanne. Four more similar items soon emerge. What Sam has found was once part of a necklace or a head band, with a small knob of spinifex resin or wax attached to the butt end of the tooth to fasten it to string from which it was hung.

This is what makes Windmill Way so incredible. The preservation is fantastic. Objects like the incisor Sam found are rare even in museum collections—archaeologically they are like hens’ teeth. We have found the largest assemblage of string and dilly bag fragments ever recovered archaeologically in Australia—it’s simply extraordinary.

What also makes Windmill Way unusual is the fact that, when it wasn’t being used by people, the site was a dingo haunt. This means that, as well as artefacts, it is also filled with thousands of splintered bone fragments—the task of working out which ones might have been left behind by people versus which were simply the remains of dingo meals will be a job for a future graduate student.

After another six hours of arduous work, the sun lowers in the sky and the stretching shadows



A fragment of dilly bag found at Windmill Way.



A macropod incisor with resin recovered from Windmill Way.

reach the team. The days’ finds are carefully packed away and handed to Chrissy and Sue to transport back to the ranger base. They fire up the quad bikes and disappear amongst the savannah, the engine sounds fading away to be replaced by the wind in the trees and birds calling.

A flock of red-tailed black cockatoos passes lazily overhead as the team trudges back up the escarpment and across to a waiting 4WD. In the quiet peace of the late afternoon it is as if time has stood still, making it easy to imagine the lives of the Aboriginal people who once called Windmill Way home.

The Laura archaeological dig is being carried out under a partnership with Griffith University over a period of five years. Funded by the Australian Research Council under their Linkage Scheme (LP190100194).





READERS PIC

IMAGE BY SONIA WALLER
Jonah Yunkaporta, Aurukun

"This photograph was taken in Aurukun towards the end of last year's wet season. There is this beautiful wetland that's quite vast, the colours are amazing and vibrant, definitely was my favourite place to ride through.

Jonah Yunkaporta was heading out to catch some crabs. I was riding my bike and we were having a yarn, as he went off into the reeds. I turned to say goodbye and I yelled out stop. I knew this would be a beautiful photo".

IT’S TIME FOR A NEW NRM PLAN FOR CAPE YORK

Cape York Natural Resource Management (NRM) is developing a new plan for managing natural resources on Cape York. In doing so, we recognise it is a shared responsibility. The Cape York community’s contribution is vital to ensuring the plan reflects community knowledge and aspirations as well as highlighting the key role that everyone has in delivering it.

What is an NRM Plan?

NRM plans provide a framework for the protection and sustainable use of natural resources such as land, water, soil, plants and animals.

The Cape York Plan will identify the region’s natural resource assets, pressures and provide solutions for management. The plan will set targets to measure whether actions have been successful. The Plan combines science, traditional knowledge and community feedback.

How can it help you?

The new Plan will look to the future and provide the region with goals, actions and investment priorities. It will strengthen Cape York’s identity, health and livability by protecting natural assets.

We hope the Plan can be a valuable resource for land managers and organisations in future natural resource management activities.

How can you help?

The people, organisations and communities of Cape York Peninsula worked with Cape York NRM to develop the current Plan which was launched in 2016. The new Plan seeks to recognise, understand and include responses to the changes in the condition and use of the region’s natural assets since that time.

We need your input as it will only be a useful guide

if it reflects the local knowledge and aspirations for the use and care of the region’s land, water, soil, plants and animals.

Have your say

Cape York NRM will collate feedback from the community to develop this 10 year plan. Scan this QR Code to complete the online survey:



21-22 ANNUAL REPORT

The Cape York NRM Annual Report has been released for the 2021-2022 financial year which has outlined the many projects underway, some interesting statistics on achievements on the Cape and a solid financial position for the year.

The organisation came out of lock-downs and back out in the field with a vengeance, catching up on project work, and setting up new endeavours.

Some of the highlights included the amazing discovery of cassowaries during a survey of Gudang Yadhaykenu Country in the Northern Cape Area; a successful all-female Indigenous training workshop for certification in heavy machinery, the Smart Farms Soil Solutions project which has set up four demonstration sites in the Endeavour Valley for the agricultural community, and the list continues.

Have your say

New NRM plan for Cape York Peninsula



21-22 ANNUAL REPORT

21-22 ANNUAL REPORT

SCAN TO DOWNLOAD

TNQ AGRICULTURAL INNOVATION PROGRAM

CALLING ON THE CAPE

Do you like to do things differently? So do we.

The TNQ Drought Hub's Ag Innovation program has kicked off with a range of activities designed to improve outcomes for producers who are open to doing things differently.

Launched in July 2022 under the TNQ Drought Hub the Ag Innovation Program aims to bring together producers, industry, corporates, innovators, entrepreneurs, researchers and investors to drive agricultural innovation in Northern Australia. We know that every producer in TNQ is already innovating, and we're keen to help them to build on their talents through access to programs, information and technologies that can help them to become more resilient and

sustainable in times of drought.

We have several projects underway and are calling on Cape York to play a key role as we build the ag innovation network and increase innovation in the North.

What we do

Capture Producer-led Problems to Solve

We're working hard to solve producer-led problems!

As part of our commitment to help producers become more resilient and sustainable, we are working with Cape York NRM to capture problems directly from producers. We then connect these

problems to talented entrepreneurs, tech companies and researchers who are committed to finding effective solutions.

Whether it's wanting the ability to detect early pregnancy in your livestock or wanting improved decision-making abilities for future climate scenarios, we are looking to capture and validate game-changing problems for the smart people in our network to solve.

On farm trials

We're testing solutions before they reach you!

We are currently facilitating on-farm trials of solutions that have the potential to benefit producers. We're aware that many producers are a bit gun-shy from purchasing new technologies that had not been properly tested leaving them with time and money spent on products that did not do what they said they would.

Our goal is to provide producers with case studies on products that were tested in the North for the North, giving our community access to product information they can have confidence in.

We are seeking interested Cape York land owners who may be interested in supporting on-farm trials and encourage anyone to get in touch for more information.

Innovation Programs

Calling all problem solvers!

Our Pre-Accelerator and Accelerator programs are open to anyone with a concept or idea that is directly targeted at solving a problem within the agricultural industry of TNQ. These programs support you to test your ideas, find your first customers, and prepare you for the journey toward launching a product to market.

If you have an idea that you would like to work on we have free online programs available – visit our website www.tnqdroughthub.com.au/ag-innovation-hub/

Digital Ag-tech Engagement Workshops

We'll show you what's possible, but you decide....

Finally, we're currently in the development phase of a Digital Ag-Tech engagement workshop that will allow producers to view and understand what economic benefits they could achieve by adopting some of the new technologies available that reduce costs and improve efficiencies on farm. This program will go live in March next year in its pilot phase.

Whether you are interested in being a part of on-farm trials, are keen to explore the production of an innovation solution you'd like to take to market, or simply want to tell us about a problem on your property or within your region you have not been able to solve, we want to hear from you.



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How to have your say and be a part of our region's Ag Innovation Ecosystem:

Contact Cape York NRM or email tnqhub@jcu.edu.au



Nicole Lucas, Dr Chris Lucani, Prof Timothy Brodribb and Ryan Orr.





COMING UP ON THE CAPE



Cook Shire Council Australia Day Awards 26 January 2023

The Cook Shire Council Australia Day Awards recognise outstanding achievement within our community.



North Queensland Threatened Species Symposium 09-10 March 2023

Hosted by North Queensland Natural Resource Management Alliance, this event brings together people working on the frontline to save threatened species.



2023 Cape York Grazing Forum 16-17 May 2023

This two-day forum provides an opportunity for Cape York graziers to meet with like-minded producers and grazing industry peak bodies to get the latest updates on the industry.



Cooktown Discovery Festival 16-18 June 2023

Discover more about the rich culture of the Guugu Yimithirr people, James Cook and his crew, and what happened when the two groups came together.



Laura Races and Rodeo 24-26 June 2023

The Laura Races are a great social event. People travel from all over Cape York Peninsula to join in the fun with friends and visitors from further south.



2023 Laura Quinkan Indigenous Dance Festival 07-09 July 2023

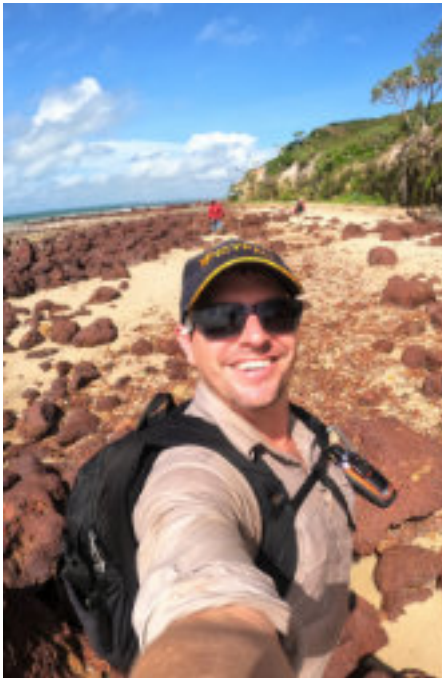
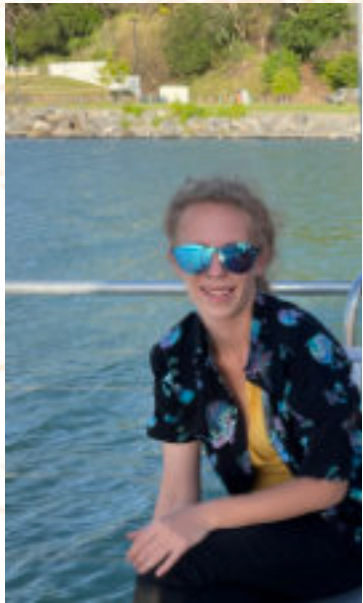
The Laura Quinkan Indigenous Dance Festival is a three-day camping festival, celebrating culture and recognising history.

PLAYING THE FIELD

You can't say we don't enjoy our work. The proof is in the pictures.

Here we have a few favourites of our team out in the field working with land managers to protect properties from fire, sampling the quality of water supplies, testing soils, helping to improve gully erosion sites and protecting threatened species.

We hope they give you a smile.





Cape York

Natural Resource Management

DECEMBER 2022