

# WARDDEKEN ANNUAL REPORT 2020-21



# NGARRIDJARRKBOLKNAHNAN KUNRED

## LOOKING AFTER COUNTRY TOGETHER



The bidbimyo (hand stencil) at the centre of the Warddeken logo is the hand of Warddeken's founder and patron, Bardayal Lofty Nadjamerrek OAM (Wamud Namok, 1926-2009).

The symbol reminds us that it is his guiding hand that led the land management movement in west Arnhem Land. His vision leads us into the future.

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Front cover: Rangers reinforce a fire break surrounding an entire patch of Anbinik remnant rainforest, from which they will later back burn. Photo courtesy of Matt Abbott.

Right: Tinesha Narorrnga checks in with teammates on a UHF radio during rock art surveys on Djalama clan estate.





Rangers trek across country during biodiversity fieldwork.

**OUR VISION IS TO HAVE  
OUR HEALTHY PEOPLE  
LIVING AND WORKING ON  
OUR HEALTHY COUNTRY IN  
THE ARNHEM PLATEAU.**

**WE WANT THE MANAGEMENT  
OF OUR LAND TO BE IN  
OUR HANDS NOW AND  
INTO THE FUTURE.**

Elder Josie Maralingurra directs  
students harvesting bush foods.  
Photo courtesy of Rowand Taylor.



# WARDDEKEN OVER THE YEARS

## Vision of Professors

2002

Kabulwarnamyo community established by Mok elders, families and dedicated group of balanda friends

2004

Manwurrk Rangers (Northern Land Council) formed, operating as CDEP ranger group (04-08)

2005

Meetings of west and central Arnhem Land elders and leaders to discuss concerns about bushfires and feral animals

2006

Inaugural Stone Country Bushwalk from Kamarrkawarn to Kabulwarnamyo

2006

WALFA Project funded

2014

NAIDOC Caring for Country Award

2012

Manmoyi ranger base established

2011

Banksia Award accepted on behalf of WALFA partner groups - 'WALFA Partnership: a 140% success'

2009

Warddeken IPA formally declared

2008

First large scale aerial feral animal cull

2007

Warddeken Land Management Limited begins operation

2015

Nawarddeken Academy community school established

2017

Established Mayh (Species) Recovery Monitoring Network

2017

Established Daluk (Women's) Ranger program

2018

Nawarddeken Academy gains Independent School Registration

2018

Wakadjaka (Monitoring and Evaluation) Subcommittee established

2018

Banksia Indigenous Award for achievement against UN Sustainability Goals

2018

Mamardawerre ranger base established

2019

10-year IPA anniversary

2019

Kunwarddebim Project formally commenced

2020

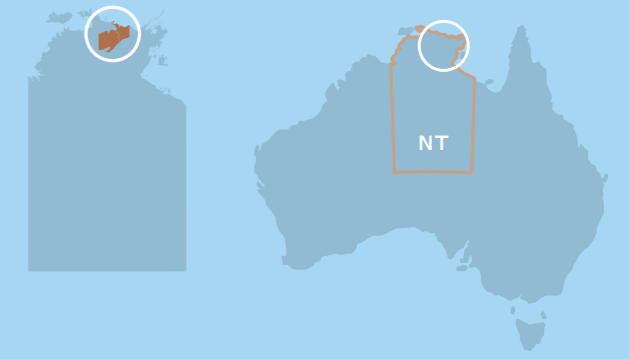
Board member Fred Hunter receives NT Ranger of the Year Award

2021

Nawarddeken Academy Manmoyi and Mamardawerre campuses gain Independent School Registration

Onwards

# THE WARDDEKEN IPA



- Ranger Bases
- Townships
- Seasonal camps
- Outstations



The spectacular escarpment and gorge country of the east Alligator region of the IPA.

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Fire is central to both work and life in the Warddeken IPA. Here, Clifton Nagurrurrba tends to a campfire in the early hours of the morning during fieldwork.

# THE WARDDEKEN STORY

Warddeken's story is one of bininj returning to country; of reconnecting with our rich cultural inheritance and preserving our unique knowledge and languages. It is the story of looking after country, drawing upon both customary and contemporary management practices. Most importantly, the Warddeken story is of building a sustainable future for our people.

For thousands of generations, Nawarddeken clan groups lived on their ancestral estates in the kuwarddewardde – the stone country of the Arnhem Land Plateau. Nawarddeken cared for and shaped this living landscape through management practices encompassing the spiritual, religious and pragmatic.

Family groups walked and camped throughout the kuwarddewardde, undertaking fine-scale burning across their estates in the early dry season. Djungkay (ceremonial managers by matrilineal inheritance) performed and oversaw ceremonies to encourage regeneration of food plants and the proliferation of animal species. Senior landowners frequently visited djang (sacred sites) and other places of cultural import, to show respect to ancestors and creator spirits, and to perform requisite rituals.

The kuwarddewardde remains the home of Nawarddeken people today, and is the location of Warddeken Land Management's three ranger bases. However, this has not always been the case, and for many long years the stone country was devoid of people.

With the arrival of balanda (Europeans), Nawarddeken began to leave the kuwarddewardde, lured by Christian and government missions, opportunities to work in the mining and buffalo industries, and the appeal of larger settlements such as Gunbalanya and Maningrida.

By the late 1960s, the kuwarddewardde was largely depopulated. Nawarddeken elders considered the country orphaned and despaired for its future. For the next 30 years, our old people – the Warddeken professors – saw and felt the devastation of large wildfires and an increasing number of feral animals impacting the physical and cultural landscape.

Their concern was matched only by their desire and motivation to return to country, to once again look after the kuwarddewardde and hand down their knowledge to younger generations. In the early 1970s, our visionary leader, Bardayal Lofty Nadjamerrek OAM, began the long process of bringing Nawarddeken back to their homeland communities, working tirelessly for the next twenty years to reconnect country and people. Finally, in 2002, Lofty moved back permanently to

his own country on Mankungdjang estate (sugar bag dreaming) at Kabulwarnamyo, where he worked alongside other bininj leaders and committed balanda friends to establish the Manwurrk Ranger program, which allowed landowners for the first time to make a living on country.

The Manwurrk rangers helped pioneer a number of innovative fire management initiatives, including the world's first savanna carbon project, the West Arnhem Land Fire Abatement Project (WALFA). Since then, carbon projects have become one of the biggest indigenous industries and economies in Australia – and they originated right here in the kuwarddewardde.

In 2007, after extensive consultation and meetings between landowners and the Northern Land Council, Warddeken Land Management Limited was formally registered as a not-for-profit public company limited by guarantee, and the Manwurrk rangers evolved into Warddeken.

Our company is responsible for looking after the kuwarddewardde, just as our ancestors were. We achieve this through extensive fire management, feral animal culls, weed control and supporting the recovery of our unique and threatened biodiversity. Through this ranger work, Nawarddeken are once again able to live on country and care for sacred locations, rock art galleries and the many cultural sites that sustained our old people. Importantly, we are also able to teach younger generations this knowledge.

With this strong foundation we focus now on not just caring for country but also on ensuring that the knowledge of our old people continues to guide future generations by teaching our children, our knowledge, on our terms and on our own country. This is our vision.

Clockwise from top left:

Rangers atop the escarpment during rock art fieldwork.

Tahnee Nabalwad participates in a workshop at the Strong Women for Healthy Country Network forum. Photo courtesy of Renee Saxby.

Sorghum, or spear grass, is one of the species which indicates seasonal change from wet to dry season. Photo courtesy of Rowand Taylor.

Children with a termite mound. Photo courtesy of Rowand Taylor.





# OUR PROFESSORS

We acknowledge the most senior and knowledgeable Nawarddeken as our professors – those who are still with us and those whose spirits have returned to the kuwarddewardde. Their wisdom and foresight set us on the path we follow today. We carry them in our hearts and their vision continues to guide us into the future.



**Bardayal Lofty  
Nadjamerrek OAM**  
1926-2009



**Jimmy Kalariya Namarnyilk**  
1934-2012



**Peter Nabarlambarl Billis**  
1935-2012



**Jack Djandjomerr**  
1945-2014



**Wurdib Nabalwad**



**Leanne Guymala**



**Molly Nayilibidj**  
1950-2021



**Leonie Guymala**  
1938-2014



**Ruby Bilidja**  
1930-2014



**Mary Kolkiwarra Nadjamerrek**



**Josie Maralngurra**



**Lillian Guymala**



**Timothy Nadjowh OAM**  
1923-2017



**Jacob Nayinggul**  
1943-2012



**Djawida Nadjongorle**  
1933-2012



**Mary Naborlhborlh**  
1930-2012

# WARDDEKEN INDIGENOUS PROTECTED AREA



An aerial photo shows the 'roads' of the IPA – a network of bush tracks built and maintained by rangers.

The commitment of our professors to see the kuwarddewardde cared for and managed into the future led to the dedication of the Warddeken Indigenous Protected Area (IPA) on 24 September 2009. Since its establishment, more than 300 indigenous people have worked with Warddeken in environmental and cultural programs that conserve and protect the IPA.

The Warddeken IPA encompasses 14,000 km<sup>2</sup> of the kuwarddewardde in west Arnhem Land, Northern Territory, bordering Kakadu National Park to the west, and overlapping with the Djelk IPA in the east and the proposed Mimal IPA in the south. The IPA incorporates the headwaters of numerous major river systems, including the Liverpool, Mann, East Alligator, Katherine and Goomadeer Rivers, and part of the South Alligator River catchment.

The IPA is home to hundreds of endemic species, a host of threatened flora and fauna, and the federally protected Arnhem Plateau Sandstone Shrubland Complex. Threatened fauna include iconic species such as djabbo (northern quoll), barrk (black wallaroo), mulbbu (Arnhem Land rock-rat), alyurr (Leichhardt's grasshopper) and nawaran (oepelli python).

Outstation communities of the IPA are:

- Koyek (east) – Kabulwarnamyo, Manmoyi and Kamarrkawarn
- Kakbi (north) – Kudjekbinj, Kumarrirrbang, Mamardawerre, Marlwon and Table Hill
- Karrikad (west) – Kudjumarndi and Mikkinj
- Walem (south) – Marlkawo

There are four permanently populated outstations in the IPA: Manmoyi, Kabulwarnamyo, Marlkawo and Mamardawerre (just outside our northern boundary). Other communities are seasonally occupied and include Kudjekbinj, Kamarrkawarn and Kumarrirrbang.

Warddeken operates from three remote ranger bases: Kabulwarnamyo (established 2004) and Manmoyi (established 2012) in the Koyek ward of the IPA, and Mamardawerre (established 2018) in the Kakbi ward. Multiple ranger bases are vital to ensuring our management programs address management issues right across the IPA.

The repopulation of the kuwarddewardde and the establishment of several ranger bases have steadily empowered Nawarddeken to care for and manage country. As Warddeken grows, we will continue to explore and develop new ranger bases and ways to support the return of Nawarddeken to country, enabling the proper care of these lands into the future.

# OUR AIMS

Conserve indigenous knowledge

Protect the environmental values of the land

Deliver natural and cultural resource management projects

Deliver fire, weed, feral animal and threatened species management

Alleviate poverty, suffering, isolation, serious economic disadvantage, and improve our members' health and wellbeing

Manage the IPA as part of the Australian National Reserves System in accordance with IUCN Category VI

Advance indigenous education



Proud junior rangers Estella Nadjamerrek and Maureen Namarnyilk.

# BOARD OF DIRECTORS

More than 427 Nawarddeken are registered members of our company, Warddeken Land Management Limited. Warddeken is governed by an entirely indigenous Board of Directors derived from this membership base.

Triennially, three board members are elected for each ward of the Warddeken IPA: Kakbi (north), KARRIKAD (west), Walem (south) and Koyek (east).

At the end of 2019, elections were held the following board members were voted in to represent members for the period 2020-2022 (calendar years).



Top: Richard Nadjamerrek during a collaborative Warddeken ranger and Nawarddeken Academy rock art survey camp.

Bottom: Penelope Yibarbuk during Anbinik forest protective burning works.

## KAKBI

- Kevin Bulliwana
- Conrad Maralngurra
- Rosemary Nabalwad

Representing clan groups: Warddjak (Maburrinj), Ngalingbali (Kudjekbinj), Yurlhmanj (Djalbangurrk), Madjawarr (Kunukdi), Marrirn (Kumarrirrbang), Wurrik (Mandedjkadjang), Mayirrkulidj (Djurlka), Durlmangkarr (Kudjaborrng/Kunburray), Djok (Ngolwarr) and Barrbinj (Kumarrirrbang/Kudjaldordo)

## KARRIKAD

- Jessie Alderson
- Fred Hunter
- Kenneth Mangiru

Representing clan groups: Manilakarr Urningangk (Mikkinj), Maddalk (Kumalabukka), Warddjak/Worrkorl (Balmana from Kundjikurdubuk), Bolmo (Dedjrungi and Dordokiyu), Badmardi (Balawurru, succession/caretaking), Wurnkomku (Nawoberr) and Danek (Kudjumarndi)

## WALEM

- Mavis Jumbiri
- Richard Miller
- Dean Yibarbuk

Representing clan groups: Djorrrolom (Bamo), Murruba (Morre), Karnbirr (Djohmi), Mimbilawuy (Karlgarr), Barabba (Mimbrung), Mandjuwarlwarl (Bobbolinjarr), Bolmo (Marlkawo), Barradj (Yanjkobarnem), Buluwunwun (Walangandjang) and Bulumo (Makkebowan)

## KOYEK

- Terrah Guymala
- Elizabeth Nabarlambarl
- Lois Nadjamerrek

Representing clan groups: Bordoh (Ngorlkwarre), Mok/Berdberd (Ankung Djang/Ngalkombarli), Yamarr (Kidbulmaniyimarra), Kulmarru (Kubumi), Rol (Bolkngok), Djordi/Djorrrolom (Kodwalewale), Wurrbbarn (Nabrang) and Warridjngu (Boburrk)

## KAKBI



Kevin Bulliwana



Conrad Maralngurra



Rosemary Nabalwad

## KARRIKAD



Jessie Alderson



Fred Hunter



Kenneth Mangiru

## WALEM



Mavis Jumbiri



Richard Miller



Dean Yibarbuk

## KOYEK



Terrah Guymala



Elizabeth Nabarlambarl



Lois Nadjamerrek

# GOVERNANCE OUTCOMES



Monitoring Officer Alys Stevens speaks with elders and landowners from Kabulwarnamyoo about Warddeken's achievements against the 2016-2020 Plan of Management, and to document their priorities for the new 2021-2025 Plan.

## Board Meetings

Membership of Warddeken is open to landowners from the 35 clans within the Warddeken IPA. Connection to country is recognised in four distinct ways, ensuring appropriate cultural governance: father's country (daworro), mother's country (djungkay), grandmother's country (kakkak), great grandmother's country (doydoy).

Warddeken is governed by a board of twelve indigenous directors, who represent the company's 427 registered members. The board operates at a high level, making decisions regarding the management and strategic direction of the company, developing policy, building organisational relationships and financial management.

During 2020-21 the Warddeken Board convened at Kabulwarnamyoo, Gunbalanya and Mamardawerre, with all meetings achieving quorum. The Warddeken AGM on the 29th of November 2020 in Gunbalanya was attended by 36 members.

For over ten years, directors have been supported by an independent governance mentor, Paul Josif. Paul works alongside the chairman and other members of the board to enhance understanding of balanda governance.

## Wakadjaka Subcommittee

The Wakadjaka subcommittee of the Warddeken board is another example of what is possible when aboriginal groups have the capacity to determine and pursue their own priorities. To understand if Warddeken is headed in the right direction, it is essential to regularly monitor and evaluate the sociocultural and ecological assets, associated threats and operational outputs outlined in the Plan of Management. The core purpose of the Warddeken Kananan dja mak Karrmorokme (Wakadjaka) subcommittee is to evaluate the progress towards achieving the vision articulated in the 2016-2020 Plan of Management.

Subcommittee membership consists of a director from each of the four wards of Kakbi, Koyek, Karrikad and Walem and four bininj experts. Support staff include the monitoring officer who is the subcommittee secretariat, the CEO, an independent facilitator and other Warddeken staff as required.

The Wakadjaka subcommittee reports and makes recommendations to Warddeken Board on:

- If the Plan of Management is being used in the management of the Warddeken IPA
- If the Plan of Management is working
- If the two toolboxes of Traditional and western knowledge and practice are being used
- How to report on the above 1-3 so that the board, Warddeken members and other parties understand what has been achieved.

The committee proudly produced Warddeken's first Monitoring, Evaluation, Reporting and Improvement (MERI) Plan. While a Plan of Management sets out what we think is going to happen – which things we will do and what impact we think we will have – a MERI Plan sets out how we are going to check if we are actually achieving our goals, and what we will do with the results.

The MERI journey has been faithful to a bininj driven approach and value set. Crucial to the Warddeken MERI program is the innovative collection and use of data born of the rich and multifaceted knowledge people accrue from interaction with their country, their families and the living cultural landscape.

The Wakadjaka sub committee met twice this year, and in the latter half of 2021 will oversee the endorsement and launch of the new 2021-2025 Plan of Management.

# 2016 - 2020 PLAN OF MANAGEMENT REVIEW

The review and evaluation of the Plan of Management 2016-2020 (PoM) in the latter half of 2020 was a consolidation of the processes and skills developed within the Wakadjaka sub-committee since its establishment in 2018.

## ACHIEVEMENTS

### UNDER 2016-2020 PLAN OF MANAGEMENT

- Establishment of the Nawarddeken Academy
- Opening a new ranger base at Mamardawerre
- Continued delivery of a highly effective fire management program
- Growth in Daluk (female) engagement and teams
- Commencement of IPA-wide Mayh (species recovery) project
- Commencement of IPA-wide Kunwarddebim (rock art) project.

To enable this review, and following the structure outlined in the Warddeken Monitoring, Evaluation, Reporting and Improvement (MERI) Plan, a large amount of information was brought together to demonstrate the outcomes of the past five years' work on country. Some of this information was quantitative data that could be summarised from reports and analyses. However, bininj knowledge and language run through all aspects of the PoM, and only senior people have the credentials to assess their status and articulate priorities in this context.

A central feature of the review was a series of landowner surveys, involving semi-structured interviews conducted using a suite of questions developed by Wakadjaka members in Bininj Kunwok. The in-depth surveys were designed to explore key senior people's perspectives on progress with regard to the PoM. Over 60 hours of interviews with 42 landowners and rangers (including priority people identified by the Wakadjaka) were undertaken on country by the Monitoring Officer with support from senior people.

In Maningrida in November 2020, the Wakadjaka subcommittee met with the express aim of synthesising these two knowledge sets to make a comprehensive evaluation of Warddeken's achievements. It was assessed that Warddeken made substantial progress towards the long-term strategic vision during the 2016-2020 period. Along with these successes, a number of priorities for Warddeken's next 5-year plan were clear, and the rich information generated through the review is being used to create the new PoM, articulating a road map for the next crucial stretch in the journey of the people and country of the Warddeken IPA.

## PRIORITIES

### FOR 2021-2025 PLAN OF MANAGEMENT

- Traditional Owners expressed resounding calls for a robust approach to the urgent conservation of many aspects of Kunmayali (knowledge) and Kunwok (language). A new project in partnership with Nawarddeken Academy is currently under development.
- The threat of Weeds of National Significance *Mimosa pigra* and *Salvinia molesta* in Mikkinj Valley (where a remnant quoll population was identified in 2017) are growing, and a strategic and long-term containment and eradication plan is required.
- As the work program of Warddeken diversifies, there is a greater need to support the professional development of rangers, including the ongoing expansion of the daluk ranger program.



Lorena Maralngurra navigates her way through the bush during a fire management camp.

# REPORT FROM THE CEO



**People are incredible. Our ability to adapt, to accept and to render the extraordinary mundane is itself exceptional.**

The chaos and fear of 2020 and the early days of the COVID-19 pandemic seem a world away from this year's well-worn path of lockdowns, hotspots, vaccines and travel restrictions. Whilst the Northern Territory is enviably fortunate in escaping both the human and economic ravages of the global pandemic so far, I still genuinely fear for the impact that COVID-19 may have in the remote indigenous communities of the NT where vaccination rates remain low and co-morbidity high. It will remain a focus of Warddeken in the coming year to support strong health measures and to keep our people safe.

Whilst keeping people safe has been a priority throughout 2020-21, we have not forgotten the vision of our founders – to care for country, to build Bininj control and agency and to look to the future. This year Warddeken grew strongly, building both our finances and our capacity to deliver the exceptional environmental works program that underpins the many triumphs of this company. Every year Warddeken delivers world class management of the biodiversity jewel of the Northern Territory, caring for an environment that is unique, globally significant and incredibly sensitive. Conditions are challenging and the task is massive, but each year the Warddeken rangers achieve and excel. This level of excellence has itself become usual, expected rather than celebrated, and it is this consistency that is so important. Key to healing the country and improving outcomes is

excellence in land management applied over time; forever in fact, as the need to care for country does not have an expiry date.

Healthy country both needs and supports healthy people. Our members, Nawarddeken, continue to fight for their communities; for access to education; for basic services and the ability to live full and healthy lives on their country. This is not an easy fight, but together Warddeken and our members are making strong progress. In particular through our subsidiary, the Nawarddeken Academy which has just this year (October 2021) registered two new Independent Schools at Manmoyi and Mamardawerre. This means that as you read this report, children across all Warddeken ranger bases finally have access to full time education, delivered to them on their own country and on Bininj terms.

The challenges of COVID-19, of empty country, of climate change, of remoteness and the trauma of dispossession will remain next year, but the future of this company is nevertheless strong. Founded with a commitment to care for country, Warddeken remains driven to build strong communities, capable of supporting and sustaining this vital landscape now and forever.

Shaun Ansell  
CEO

# REPORT FROM THE CHAIRMAN



When I was reflecting on all of the different Warddeken work programs, I realised that each of them continues to grow bigger, stronger and more ambitious as the years go on.

I am proud that when we set out to do something at Warddeken, we stay committed and keep doing the hard work, year after year. When we design and implement projects, we are thinking about the long-term.

Warddeken's fire program remains world class and delivers strong outcomes year after year. In 2021 our Anbinik project celebrates ten years of actively protecting an iconic stone country ecosystem. The Nawarddeken Academy has just launched schools at Mamardawerre and Manmoyi communities. Our Kunwarddebim Rock Art Program and Mayh (Species) Recovery Program now involve landowners from across the IPA in exciting survey, monitoring and conservation works every year. Each of these is an impressive achievement. Together, they represent a real and lasting change we are making for country, our culture and the communities in which we live.

We have come a long way from the early days, when we thought we were lucky to have funding for five part-time rangers! I don't think back then any of us – the young people or the old people who started Warddeken – would have believed that 15 years later, our stone country company would be employing more than 200 bininj each year to care for the kuwarddewardde. I am proud and I know they would be too. In Warddeken, we have a company that all Nawarddeken can be proud of.

Dean Yibarbuk  
Chairman



Burning for bim – this year more women than ever were involved in on-ground burning activities, including protective burns around rock art complexes of significance.



# THE YEAR IN NUMBERS

Bininj (Indigenous)  
Rangers Employed

240

Warddeken Members

427

Square Kilometres Managed

14,000

Wildfire Suppression  
Late Dry Season  
(Aug-Dec 2020)

46 fires controlled

4,802 ranger hours 550.7 chopper hours

Feral Animals

2,336 feral animals removed

1,907 mixed feral animals  
culled aerially

429 mixed feral animals  
culled on ground

Employment

121 Bininj (men)

119 Daluk (women)

13 Balanda (non-indigenous)

Anbinik Isolate Forests

15 forests protected by on ground fire break

30 forests protected by targeted APB

Rock Art

30,000+ sites in the IPA

24 sites conserved 177 sites rediscovered

Culture Camps

4 rock art and  
culture camps

2 biodiversity and  
culture camps

1 daluk culture camp

140+ attendees

60+ children

Prescribed Burning  
Early Dry Season  
(April-July 2021)

16,158 km APB

1,198 km on ground burning

38 landowners

# MANWURRK FIRE MANAGEMENT



An early dry season burn on the banks of the Liverpool River. Photo courtesy of Rowand Taylor.

For many thousands of years, Nawarddeken used fire as a tool to manage country to their benefit and the ecology of the kuwarddewardde expresses this imprint in many ways. After the widespread depopulation of the plateau in the 1960s, large wildfires dominated in the absence of dry season burning patterns and devastated the region.

## Background

In 2002, under the guidance of Bardayal and other professors, Warddeken reintroduced indigenous fire management practices to the region, playing a central role in the development of the pioneering West Arnhem Land Fire Abatement (WALFA) Project.

Through implementing a combination of traditional and modern fire management techniques – primarily conducting prescribed burns in the early dry season and wildfire suppression in the late dry season – Warddeken rangers have stabilised the fire regime of the kuwarddewardde, in turn protecting the environment and cultural heritage sites and reducing greenhouse gas emissions.

## WALFA Project

This strategic landscape scale fire management underpins the ground breaking WALFA Project where industry, government and indigenous ranger groups work in partnership to offset greenhouse gas emissions. Initiated in 2006, the WALFA Project saw ConocoPhillips and Darwin Liquefied Natural Gas work with the Northern Territory Government to fund the fire management activities of five ranger groups across 2.8 million hectares to produce an annual offset of 100,000 tonnes of greenhouse gases.

In the fifteen years since WALFA's inception, Warddeken and our project partners have built our capacity to undertake broadscale fire management, and the success of the project has demonstrated the strong environmental, cultural, social and economic benefits that stem from good fire management practices. Greenhouse gas abatements have also exceeded expectations, with over 3.2 million tonnes of greenhouse gases abated to date.

Excess abatement is marketed through the aboriginal owned, not-for-profit company ALFA (NT) Ltd. This has led to substantial locally generated revenue being reinvested into world class aboriginal ranger groups who manage the WALFA Project. In this way the Bawinanga (Djelk), Jawoyn, Mimal, Adjumarllarl and Warddeken rangers are seizing control of their own destinies.

## 2021 Early Dry Season Burning

At the beginning of each year, senior Warddeken staff conduct widespread landowner consultations to gain consent and feedback regarding the operationalisation of our early dry season burning program. COVID-19 restrictions that hampered consultation efforts in 2020 were thankfully lifted this year, and we were again able to undertake face-to-face consultations with maps and visual aids. Led by senior ranger Terrah Guymala, over March and April a total of 106 landowners were consulted from homelands within the IPA and from additional locations including Barunga, Eva Valley, Katherine, Pine Creek, Jabiru, Gunbalanya and Maningrida.

Strategic on ground burning is performed wherever possible throughout the IPA, particularly along roadsides and hunting tracks. Rangers undertake ground burning from a 4WD vehicle or by foot, and use either a drip torch or matches as the ignition source. In 2021, on ground burning was performed across more than 240 kilometres of tracks and roads within the IPA.

Ground burning is also utilised to protect environmental assets such as Anbinik rainforest isolates and stands of anlarrh (fire sensitive native cypress), as well as cultural sites including kunwarddebim (rock art galleries) and djang (dreaming sites). A total of 1,198 kilometres of ground burning was conducted across the Warddeken Indigenous Protected areas between May and July 2021.

Rangers and coordinators ensured that all outstation communities and associated infrastructure within the IPA were protected by installing asset protection firebreaks, before commencement of aerial prescribed burning (APB). In 2021, Warddeken rangers completed 16,158 kilometres of APB in the early dry season. These works commenced on the 5th of May 2021 and finished on the 15th of July 2021.

Due to COVID-19 restrictions, the 2020 Arnhem Land Fire Abatement (ALFA) end-of-year fire meeting was held via Zoom on the 15th of December 2020. Warddeken rangers from each base attended remotely. Twelve Warddeken rangers and coordinators participated in the pre-season fire meeting in Maningrida on the 7-8th April 2021.



Arijay Nabarlambarl lights up country at dusk.  
Photo courtesy of Rowand Taylor.



The many different aspects of our fire management program.  
Clockwise from top left: Asheena Guymala burns along the roadside near the Manmoyi base;  
Rangers plan aerial prescribed burning using fire scars; Freddy Nadjamerrek uses a tractor to  
reinforce a fire break around the Kabulwarnamyo community and ranger base.

CELEBRATING  
10 YEARS OF  
PROTECTING  
AT-RISK ANBINIK  
(ALLOSYNCRPIA  
TERNATA)



# ANBINIK

## REMNANT RAINFORESTS

“I have to tell a story about Anbinik. That Anbinik was there before we were born; before the old people were born. Now the old people tell us we all have look after that Anbinik. Now the younger ones have to look after the Anbinik.”  
– Doreen Nayilibidj

2021 represented a major milestone in Anbinik management, being the tenth year Warddeken has delivered a forest protection program to ensure the survival of fifteen entire Anbinik isolate forests.

The ancient, spectacular and culturally significant Anbinik forests were the dominant ecosystem of the kuwarddewardde as far back as the last Ice Age. These large, broad canopied, shady trees are relictual species; primeval ancestors of today’s eucalypts. Endemic to the west Arnhem Plateau, Anbinik are important to Nawarddeken for their contemporary ecological status, as well as the cultural importance they held for old people, who valued the forests for the shade and shelter they offered, and actively managed them using fire.

Anbinik forests are slow growing and fire sensitive, and when Nawarddeken left the plateau in the 1960s, Anbinik forests were left vulnerable to devastating wildfires, leaving entire stands of forest destroyed. Today, Anbinik is largely restricted to the deep gorges and rugged escarpments of the plateau, where the landscape provides protection from fire. In the savanna woodlands, small isolate forests persist and are dependent on active and ongoing management and protection from wildfire. Old people maintained these patches through careful fire management, a practice now reinstated by Warddeken at fifteen of the most 'at risk' Anbinik isolate forests.

Within the IPA there are fifteen identified 'at risk' priority Anbinik forests that are visited and cared for annually through a dedicated Anbinik Management Program. This year, rangers were able to visit all fifteen sites and comprehensively protect them by maintaining the existing mineral earth breaks surrounding entire stands of forest.

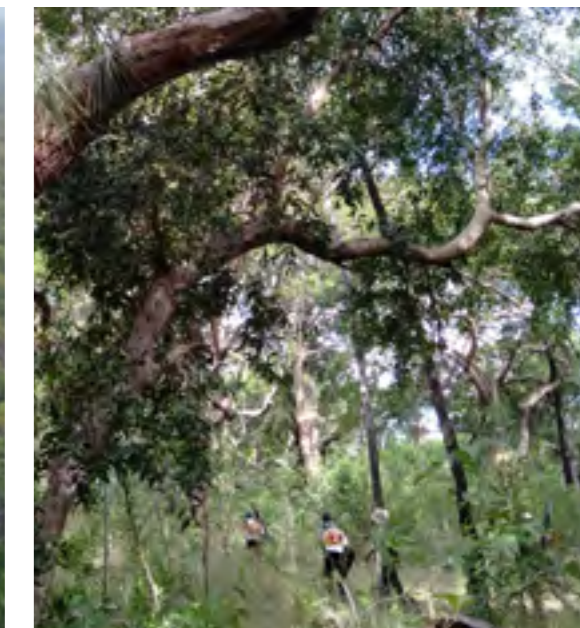
Over four weeks in the late wet season, bininj and daluk rangers from all three Warddeken bases came together across a series of camps to continue our program of best practice forest management. This physically demanding job involves manually clearing approximately 20,000 lineal metres of mineral earth breaks, using brush cutters, chainsaws and leaf blowers. Once an entire forest is surrounded and protected by a firebreak, rangers wait until the cool of the late afternoon to backburn from the breaks.

For numerous other sites across the IPA, rangers perform targeted aerial prescribed burning in the immediate vicinity of the forests, to offer protection from wildfires through strategic early burned breaks.

After ten years delivering the Anbinik Protection Program rangers are seeing positive ecological outcomes in terms of forest regeneration and canopy cover; just as importantly, it has generated strong cultural learning outcomes, with senior rangers, cultural leaders and elders reporting that the younger generations are becoming knowledgeable about the species and how to manage it using customary techniques.

**This important work must be continued in perpetuity to ensure the ongoing protection of Anbinik forests. In coming years, Warddeken's goals for this project are to:**

- Increase from 15 to 20 the number of managed at-risk forests
- Develop and implement a largely automated GIS monitoring program to demonstrate the efficacy of our management works
- Develop and deliver a custom unit of learning for Nawarddeken Academy, to be taught annually in Bangkerreng (late wet season) when management work is undertaken
- Work with elders and senior cultural advisors to document links between Anbinik, songlines and ceremony.



Previous page: Lorena, Suzannah and Alexandria reinforce a firebreak around an entire stand of Anbinik forest in the Makkalarl region.

Left: An aerial image clearly shows the mineral earth fire break rangers have installed around this Anbinik forest at Makkalarl.

Above: Rangers on the ground during the works.

# KUNWARDDEBIM

## ROCK ART

The tens of thousands of kunwarddebim (rock art) sites spread across the vast expanse of the Warddeken IPA represent one of the most significant collections of cultural heritage anywhere in the world. Warddeken is committed to documenting and conserving kunwarddebim, which lies at the heart of Nawarddeken cultural identity.

Rangers and Traditional Owners drive our rock art research and conservation program. While ad hoc rock art surveys and site works have long been a feature of Warddeken's work program, in 2019 a turning point in this critically important work was achieved when the Kunwarddebim Project moved from pilot phase and formally commenced.

Through this project, we have set ourselves the ambitious goal of working with landowners to strategically survey the entire IPA, documenting and conserving art sites in the process. While we have a long way to go, steady progress is being made and the project continues to engage bininj, reconnecting clans and Traditional Owners with the artistic and spiritual legacy of generations of their ancestors.

The rock art project officer works alongside rangers and Traditional Owners using a customised methodology of surveying and mapping kunwarddebim, and directing a rigorous program of site conservation and protection.

In the second full year of the project, these are some of the project highlights.

**60+ Traditional Owners engaged**  
**5 clan estates surveyed**  
**177 sites surveyed**  
**.061% overall IPA surveyed**  
**64 motifs identified**



This page: Bim project manager Claudia Cialone with Rosemary Nabalwad and landowner Jennifer Hunter during a survey on Bolmo Dordokiyu estate.

Opposite page: Mok landowners, djungkay and other family members during a collaborative camp with Nawarddeken Academy.





## Rock art protection and story telling — relinking people and country

During the second complete year of our rock art project, a new project officer was hired to assist the project manager in delivering ambitious project outcomes. Consultations with traditional owners indicated their desire for the project to conduct longer camps in more remote areas, with the multiple aims of getting back on country, promoting intergenerational knowledge transfer, surveying and maintaining cultural heritage.

In addition to a great many shorter trips, we conducted five major camps across four different clan estates. We are also strengthening collaboration with Nawarddeken Academy, exposing young people to the cultural stories of bim, but also to the technology and methodologies of professional rock art conservation and survey.

### Ngalingbali Camp

15 sites documented

In September 2020, a rock art camp was held in Ngalingbali clan estate, involving 30 rangers and family members. Conrad Maralngurra and Priscilla Badari – Traditional Owners and Djungkay for the area – wished to camp in this area. The camp was geared towards discovering new art, as well as conducting cultural activities for the sake of knowledge transfer between elders and children. Amongst other very old and unknown paintings, Conrad also led the team on an expedition to find a site he visited approximately 40 years ago. The site features what is likely the longest single-piece painting in Australia – a mythological being called ‘Naworo’ who represented himself on the rock as a six-toed creature, and a Namarnde – a spirit who can manifest malevolent powers when visitors do not comply with traditional rules. The site is also a burial place for a member of the Maralngurra family. Plans were made to go back next year to take other Traditional Owners who have never seen the site before, to write a story and fence it off against feral animals.

### Mayirrkulidj Camp

6 sites documented

In March 2021, we set off with a group of rangers from Mamardawerre to camp on top of a spectacular waterfall at Djurilka, a place in Mayirrkulidj clan estate. This was the first (wet season) camp of the year organised by the team. During surveys, we found numerous old sites previously undocumented, some of them at the entrance of deep dark caves which are inhabited, according to the tradition, by the old Djidjnguk – the hairy dwarf spirit who helps Bininj catch fish. Due to the wet season, we had to follow the old road from the helicopter to get to the waterfall/camping site. Now that we know of all these heritage treasures in the region, we made a plan with to go back there overland to explore more, maybe on a bushwalk!



From top left:

A white ochre painting of a woman, documented by rangers during a survey in the Deaf Adder Gorge region during the Badmardi clan camp.

Helicopters are an essential component of rock art works in the kuwarddewardde, allowing rangers and Traditional Owners to access far-flung and remote estates.

Lorena Maralngurra and Catherine Ralph work together to document paintings on Catherine's first rock art survey on her Bolmo Dedjrungi clan estate.

Tahnee, Theona and Lorena light a cool fire after removing built-up fuel from under and around an art site.

Mary Kolkwarra Nadjamerrek reads a rock art report, which are prepared for each clan estate annually. This allows landowners who are unable to physically participate in surveys to learn about the rock art survey and conservation work undertaken on their country.



Rangers and landowners at the Naworo site on Ngalngbali clan estate. The main bim site contains what may be the longest single-piece rock art painting in Australia. Measuring eight metres long, the painting is of great significance and importance to Traditional Owners. The ceiling features an enormous painting of Naworo, a giant with six toes who is a guardian of the land. The image is considered to be his waralno (spirit), that he placed there himself. Bim depicting ancestor creation beings are believed not to have been painted by bininj (people), but rather to be the waralno of the creation beings, which they have themselves placed upon the rock surfaces.



## Bolmo Dedjrungi Camp

### 9 sites documented and conserved

In June 2021, the rock art team travelled to Bolmo Dedjrungi clan estate with Traditional Owners Jennifer and Jessie Hunter, and djungkay Catherine Ralph, supported by a group of Mamardawerre rangers. Here, we camped for a week upstream towards the southern banks of the East Alligator River. The purpose of the camp was to take landowners back to renowned galleries in need of maintenance. It was also a long-held wish of Fred Hunter – senior Traditional Owner – to see his son and niece involved in cultural heritage maintenance, after he had done so primarily by himself for so many years. Young Bolmo Dedjrungi Traditional Owners don't get to see rock art sites on their country too often, as the sites are hidden away and accessible only by helicopter. During the camp, the rock art team worked together with the Hunter family to plan and prioritise an annual maintenance and conservation schedule, which will involve a new model of work whereby the works are coordinated and run by them, but supported and resourced by Warddeken.

## Mok Camps

### 6 sites documented

### 2 maintenance camps with Nawarddeken Academy

In October 2020, the rock art team supported by the daluk coordinator and Nawarddeken Academy teachers and students conducted a short camp at Aldaddubbe, in Mok clan estate. The site includes a range of paintings, from extremely old red ochre depictions to post-contact art of a police officer and buffalo. Traditional Owner Rhonda Nadjamerrek and elders such as Mary Kolkiwarra Nadjamerrek led learning activities, with a focus on facilitating rock art learning on country.

In July 2021 the rock art and Nawarddeken Academy teams again joined forces to camp together in the same location. This camp was bigger, including other senior traditional owners for Mok who normally reside in the larger township of Gunbalanya, such as June, Hagar and Donna Nadjamerrek, and senior landowners for Bolmo Marlkwawo country including Shirley and Cristiana Djandjomerr.

The scope of both camps was for children to learn the Warddeken two-way approach, which in relation to rock art involves children observing the rangers involved in maintenance activities, and learning how to use the technology we all developed to record the art. The camps also provide opportunities for learning from the elders giving voice to the history of country and how its flora, fauna, food and ancestral stories were depicted by old people on the rock, especially for the future generations.



Left page:

Top: Professor Mary Kolkiwarra Nadjamerrek shares her first-hand knowledge of rock art and occupation sites with Nawarddeken Academy students.

Bottom: Rosemary Nabalwad uses our custom bilingual data recording sequence to capture important cultural and conservation knowledge about the art site.

This page:

Left: Young landowner Catherine Ralph, ranger Tinesha Narorrnga and project manager Claudia Cialone work together to document a major gallery during the Bolmo Dedjrungi survey camp.

Right: A painting of a woman wearing a dilly bag on her head and carrying a digging stick, documented by rangers during a survey around Kudjekbinj on a Ngalingbali clan camp.





# MAYH (SPECIES) MONITORING PROJECT

In the face of ongoing mammal declines across northern Australia, Warddeken has established a long-term monitoring network to understand the impact of our own land management practices and programs on priority mammal species, including djabbo (northern quoll), yok (bandicoot), bakkadji (black-footed tree-rat) and djorrkkun (rock ringtail possum). The project continues to deliver meaningful involvement and employment of landowners and rangers, generating positive outcomes far beyond just the scientific.

Now in its fifth year, the Mayh Monitoring Project is the foundation for all species recovery initiatives within the Warddeken IPA. The project forms the bedrock information base by which we can gauge the success of our landscape scale and species-specific management actions.

The project is defined by a commitment to a real and meaningful partnership with rangers and Traditional Owners, which has seen the Mayh Project set a benchmark for best practice collaborative works between western scientists and indigenous ecological knowledge holders. The project values the experience and knowledge of landowners alongside the collection of robust data to answer key ecological questions, and this approach has seen the Mayh Project maintain strong support from Traditional Owners and community.

Manmoyi rangers work together during the first round of motion sensor camera deployments.

### Camera surveys in the IPA

Over the 2021 wet season, rangers from Kabulwarnamyo, Manmoyi, and Mamardawerre worked hard, deploying camera traps around the community and surrounding areas. Many young rangers learned to set up cameras for the first time, working alongside more experienced crew. Every expedition to set out cameras is an opportunity to build rangers' skills in survey methodology, and to exchange ecological knowledge during habitat surveys – drawing on customary and western scientific knowledge systems. It's also a chance to get families out on country and bring together different generations to manage the clan estates that comprise the Warddeken IPA.

### Resampling of all 120 Monitoring Sites

Despite the setbacks to the Mayh Monitoring Program in 2020 due to COVID-19, Warddeken successfully caught up on missing sites from the previous survey year. Through the hard work of rangers and landowners who participated in camera surveys from March through to June, we were able to resample all 120 long-term sites in the Warddeken IPA. This is an amazing achievement that the whole Warddeken community has sustained over the last five years. We look forward to undertaking with our partners a baseline analysis to understand the impact of fire and feral animal management strategies on priority Mayh in the IPA.



This page from top left: Daluk rangers deploy cameras. Ngarrbek (echidna) have been captured on cameras across the IPA, and their scats are often found during work activities, however they are rarely seen in person. This was a rare exception.

The Garnamarr survey camp crew, many of whom were involved for the first time in an on country Warddeken work program.

Right page: Conrad Maralngurra and Johnny Reid during camera trap deployment on Johnny's Wurnkomku clan estate in the west of the IPA.



### Garnamarr Camp

Traditional Owners from Karrikad (western) clan estates of the Warddeken IPA came together in May at the Garnamarr campground (Jim Jim Falls) in Kakadu for a very special camp focused on connecting clans from the extremely remote Karrikad ward of the IPA with their highly inaccessible country.

Over the two-week Garnamarr camp, two support staff and 14 rangers conducted vegetation surveys and deployed 130 camera traps as part of our Mayh Monitoring Project. Being based in Kakadu allowed for shorter helicopter ferries to the survey sites and provided flexibility for families living in the surrounding area to attend.

Ferrying into the IPA from Kakadu National Park was a new challenge and everyone on camp helped with the preparation of field gear – the wurdwurd (kids) especially enjoyed helping to make the peanut butter, honey, and oat bait!

At the campsite, daluk collected and prepared pandanus for weaving and wurdwurd learned about their families' connection to country. Garnamarr camp reflects Warddeken's continued commitment to delivering scientific projects with integrity and valuing cultural outcomes.

### The Mayh Project in a snapshot:

- During November and December 2020, extensive landowner consultations were held in Kabulwarnamyo, Manmoyi, Mamardawerre, Whistle Duck, Gunbalanya, Jabiru and Darwin, completing the approval process for all 2021 camera deployments.
- 140 camera stations deployed in 28 sites across five clan estates were deployed during March 2021, involving 39 rangers. These cameras were retrieved at the end of April by the ecological monitoring officer and rangers at Kabulwarnamyo, Manmoyi and Mamardawerre.
- 130 camera stations were deployed at 26 sites across three clan estates at the beginning of May at Garnamarr camp with Karrikad (western) clan estate families and rangers.
- 20 camera stations were deployed with four Njanjma Rangers at Mikkinj Valley at the end of May.
- Analysis of photos from the cameras by rangers will be ongoing throughout the rest of 2021 (925,088 images collected).
- So far, we have recorded 18 native mammals, 25 bird species, seven reptiles, one frog and seven feral species this season.

Left: Senior ranger Terrah Guymala undertakes vegetation surveys.

Right: Rangers and Ecologist Cara carefully plan each deployment, with helicopters used to access remote areas of the IPA.



### Exciting new projects commencing in 2021/2022

#### Djabbo (Northern quoll) research and recovery project

Djabbo populations identified by the Mayh Monitoring Project are to be targeted for further investigation to help foster the recovery of known populations. With meaningful involvement and employment of landowners and rangers, Warddeken will deploy a camera density grid to estimate northern quoll and feral cat densities at priority locations to inform feral predator and fine-scale fire management.

#### Yirlinkirrkirr (White-throated grass wren)

In partnership with Territory Natural Resource Management, Warddeken will conduct a targeted program to understand the current status of Yirlinkirrkirr (White-throated grass wren). Through a participatory process including workshops and mapping with Traditional Owners, rangers, scientists, and other stakeholders across Warddeken, Kakadu and Jawoyn, we will deploy motion cameras and songmeters (to record mayhmayh calls) to detect Yirlinkirrkirr across the stone country. We look forward to working with our neighbours to monitor this nationally important species.

Deadly daluk. From left, Tinnesha, Suzannah, Lorena, Alys and Alexandria after completing a hard day's biodiversity survey work.



## BOBO - ALYS STEVENS

At the end of 2020, we said bobo (goodbye) to one of our longest-serving employees and the driving force behind the Mayh Project, Alys Stevens. Bulanjdjan Alys started her journey with Warddeken back in 2010, as an ecologist seconded by the NT Government's Flora and Fauna Department to work with rangers in the Warddeken and Djelk IPAs. Throughout her time with Warddeken, Alys has continually set best practice benchmarks on genuine collaborative, cross-cultural biodiversity programs, as well as worked with bininj leaders to establish a robust and thorough program of monitoring and evaluation in the form of the Wakadjaka sub-committee. This, along with the lifelong friendships and family relationships forged over more than a decade, ensures Alys leaves a lasting legacy at Warddeken.

Thank you and bobo for  
now bulanjdjan!



There is dialectical variation across bininj kunwok in the names applied to the northern brown bandicoot. In Kundedjnenghmi, the language of the stone country peoples, three terms are applied based on the size and habitat in which the animals are found (with yok. Used as a general descriptive).

- **yok** – smaller and woodland dwelling bandicoots are referred to as
- **kobbol** – larger stone country individuals
- **ngarrarn** – the largest of them all

Yok are important to bininj for a great many reasons. There are numerous bandicoot-dreaming sites across the IPA, they have ritual roles in ceremony, they are represented in rock art, and yok are still prized food sources.

Senior people have observed a decline in yok over the past 20 years, concurrent with western scientific findings. In the Warddeken IPA, landowners have been heartened by seeing yok in the images coming in from the Mayh Monitoring Project.

The northern brown bandicoot is the largest of Australia's bandicoots, averaging a length of 30 cm, and has been recorded up to 47 cm. They are nocturnal, solitary and omnivorous, eating a range of small animals, roots and plant matter. As with all bandicoots, they make signature conical diggings as they fossick for resources.

Significant grass cover is a key requirement for yok. During the day they rest in long dense grass in nooks and depressions, will form the grass into cylindrical nests or take shelter in hollow logs. When understory is severely burnt by large and hot late fires or denuded by buffalo and pig, yok are susceptible to predation and are unable to persist. Remove the threatening process and if individuals remain, they are able to quickly repopulate as yok can breed all year round, with females producing and weaning around 4 young (up to 7) within 60 days.

In the Warddeken IPA the Mayh Monitoring Project has recorded yok at 20 sites from 2017-2020. A simple analysis supports the habitat requirements described above – yok are commonly found in areas with:

1. gentle, patchy and early fire regimes; and
2. a diverse and mostly dense grass and midstory layers.

This map shows locations where motion sensor camera traps have detected yok within the IPA.



# MAYH (SPECIES) SPOTLIGHT - YOK NORTHERN BROWN BANDICOOT (ISOODON MACROURUS)

# KUNMAYALI DJA KUNWOK

## KNOWLEDGE AND LANGUAGE

Kunmayali dja Kunwok flows through all aspects of life on country. Our unique knowledge systems, skills and languages define us as Nawarddeken, the people of the kuwarddewardde. They define our relationships to each other and to country. Our professors strongly believed that cultural knowledge programs must continue and expand, stressing the need for kunmayali to be passed on to younger generations.

Using our knowledge and speaking our language about places, plants and animals, the behaviour of animals and the seasons, keeps our culture strong. Carrying out cultural responsibilities and practices, such as visiting djang, burning according to tradition and law, collecting bush foods and medicines, enacting ceremonies and performing increase rituals ensures that our culture stays strong and that the kuwarddewardde is healthy. We ourselves are also healthier and happier when we do these things.

Customary knowledge and practice are interwoven throughout each and every work activity undertaken by Warddeken rangers. Whether it be lighting fires at the right time of year in the right weather conditions, understanding the key habitats and behaviours of endemic species, or being aware of the location of sacred sites while undertaking roadwork – kunmayali is an integral component of all that we do to manage the kuwarddewardde.

Below are some of the major events throughout the year that focused primarily on documenting and transmitting kuwarddewardde knowledge and skills.



Senior knowledge holder Serina Namarnyilk shares stories about country with young landowners.  
Photo courtesy of Rowand Taylor.

This page: Rosemary Nabalwad takes off her pack for a moment to cool down in a spring.

Right page:

Top right: Anijay Nabarlambarl carried Venetia Garnarradj on his shoulders during the bushwalk. This was Venetia's first time visiting her country.

Bottom left: Young Maureen and Venetia take a moment to look out over their country during a bushwalk.

Bottom right: The crew after completing the walk.



### Kurruwil Bushwalk

Rangers from our Mamardawerre base made a decision in early 2021 that they wanted to undertake a bushwalk across the Kakbi (northern) region of the IPA. The aim of the walk was to spend time on country not often visited due to a lack of access, and introduce young Traditional Owners to their clan estates.

In July, 22 people – nine adults and 11 kids – walked 22 kilometres from Kurruwil to Mamardawerre, passing through three clan estates: Madjawarr, Mayirrkulidj and Djalama. The group was represented by Traditional Owners and djungkay from all of these clan groups – including a number who had never visited these areas. Family members carried 2-year-old Venetia Garnarradj on their shoulders to visit the Djurlka area for which she is a Traditional Owner.

The walk offered a final opportunity for rangers to undertake fine-scale ground burning before the turn of the season and engendered much discussion about place names and country. During the week-long walk, the group hunted for buffalo and file snakes, and caught fish and turtle in the billabongs and freshwater systems along the way.

As the first bushwalk for Mamardawerre rangers, it was a huge success and has emboldened rangers and Traditional Owners to run a larger-scale walk in 2022.





### Nabiwo Kadjangdi increase ceremony

One of the most powerful and vital aspects of Nawarddeken culture is the web of djang (dreaming) sites that exists across the kuwarddewardde. Djang refers to important cultural sites that have spiritual or religious significance, and often there are ritual practices required at djang sites to maintain their health, as well as the health and abundance of associated flora and fauna species.

Traditional Owners of the Mok clan are responsible for caring for a number of sites linked to the spiritual, ecological health of mankung (wild honey). The name of Mok estate is Mankungdjang, which literally means ‘wild honey dreaming’. This makes mankung and associated spirits, sites, songs and stories of the utmost importance to Mok.

In the July school holidays, 41 Nawarddeken associated with Mankungdjang estate came together to celebrate and renew increase rituals associated with Nabiwo Kadjangdi, an important djang for the Nabiwo species of native bee. Importantly, the group included 26 children, who were guided and supported by senior landowners and elders to perform the increase rituals around the rock that represents the djang.

For many of the young participants, it was the first time they had been involved in performing such a sacred ritual. For others who had participated in previous increase rituals as much younger children, it was an opportunity to become more confident in undertaking their obligation as future custodians of the site.



### Bush Tucker Diaries and Seasonal Calendar

Traditional Ecological Knowledge of bush food and medicinal plants is considered a top priority for bininj, and given the breadth and depth of the subject, it requires ongoing learning for bininj of all ages. Each ranger base runs on country activities for rangers, children and elders based on the seasonal calendar and availability of resource plants.

Favoured bush fruits such as green plums and bush blackcurrants are easily identified, can be eaten straight from the tree, and are consumed in vast quantities when in season. Many other bush foods, however, require more nuanced knowledge of plant species, as well as involve more complex preparation before.

The Bush Tucker Diaries project was started in Mamardawerre with the aim of taking senior daluk out and recording seasonal plants and tucker on a monthly basis. This information is then collated and made into posters to share with the community and visitors, outlining what tucker is ready to eat that month. At Kabulwarnamyo, daluk rangers and elders continue to work collaboratively with Nawarddeken Academy to teach children about seasonal indicators and bush foods. Manmoyi rangers have continued to not only document bush food and medicine on video, but to transcribe, translate and in some cases add subtitles to movies. It is anticipated that when a daluk ranger coordinator is hired at the end of 2021, that this work and the important learning resources being created will increase.



Top: Young Les Brown during the Nabiwo Kadjangdi increase ceremony, held on his kakkak (maternal grandmother's) clan estate.

Left: Elders Mary and Josie with younger landowners before the increase ceremony.

# MAK (LETTERSTICK) WORKSHOP

Start



This mak is an invitation for two clans to come together in four days' time for a kangaroo fire drive.

- Start reading at top cross
- The negative spaces between each line represents one day
- Finish reading at bottom cross.

Finish

“Mak are like kunwok (talking) but on kundulk (sticks) instead of being spoken. They are an invitation for bininj to come together.”

- Sarah Billis

Mak is the bininj kunwok word for lettersticks or message sticks – small pieces of wood with carved inscriptions that were once delivered between clans as a means of communication.

Although occasionally still used during ceremony, many Nawarddeken Traditional Owners have expressed concern that the knowledge of how to make and interpret mak is in danger of being lost, with many rangers indicating that they were interested in learning this skill. Two elders were identified as holding this knowledge – Mary Kolkiwarra Nadjamerrek from the Kabulwarnamyo ranger base, and Berribob Dangbungala Watson from Manmoyi ranger base, and were engaged in their capacity as professors to share their knowledge.

A workshop was run at Kabulwarnamyo over the wet season to teach adults, teenagers and children how to make and inscribe a message stick. Facilitated by Mary Kolkiwarra Nadjamerrek, 20 younger generation Nawarddeken were able to participate and learn from the most knowledgeable senior woman of the kuwarddewardde.

**Berribob and Mary have taught us:**

- Message sticks were most commonly used as a means of inviting bininj to come together for a major event such as a kangaroo fire drive, fish trapping event, or ceremony.
- They were used to provide updates during ceremonies.
- There are various styles of marks used, varying from clan to clan. However, old people were able to read the messages no matter where the mak had originated.
- Yorndidj (stone blades), which were commonly carried by bininj in their 'bush toolkits' were used to carve the markings.
- Mak were made and used all year, however were most often sent in wurrkeng (late dry season) or kurrung (build up) when fire drives and ceremonies were common.



Clockwise top right: Mary supports great-grandson Richard Nadjamerrek to prepare his own letterstick.

Harvesting wood for the workshop.

Mary described to granddaughter Gabriella Maralngurra how message sticks were used by old people.

Right page:

Top: Mary instructs granddaughter Lorraine Kabbindi White on how to carve markings into a letterstick.

Bottom: Close up detail of Mary inscribing a letterstick.



# KUNWOK LANGUAGE

Our languages contain the words to describe the mythology and landscape of the kuwarddewardde, and speaking our language is an integral part of our culture.

There are six languages that make up the Bininj Kunwok language group. While Kundedjnjenghmi is the original language of the kuwarddewardde, most young Nawarddeken are not fluent speakers. Today, Kunwinjku is the dominant language spoken across west Arnhem Land with around 1200 speakers, many of whom live in Gunbalanya.

Community members and elders are concerned that younger generations are not attaining a comprehensive vocabulary in Kunwinjku, which can only be reached through learning and practising language on country, as such a large percentage of the Kunwinjku vernacular is related to the natural environment. At Warddeken, we play a vital role in helping to reduce the loss of language by providing the space and resources for children and young people to learn Kunwinjku on country, where the natural and cultural environment supports the expansion of their vocabulary.

## Place Name Project

Terrah Guymala, a senior ranger and board member, has for five years now led a project to install place name signage across the roads and tracks of the IPA. Through this important work, Terrah has brought together existing place name data from a range of sources, as well as documented new place names in collaboration with community elders. So far, over 250 signs have been installed across Bordoh, Rol, Djordi, Mok, Berdberd, Djalama and Ngalngbali clan estates. Members of other clans have expressed interested in joining the project, which is slated to expand in coming years.

## Kunwok in project reports

Both the Mayh Recovery Project and Kunwarddebim Project continue to operate in a deliberate space of bilingualism, with the respective project officers deeply committed to delivering the projects, documenting outcomes and producing communication materials in both Kunwinjku and English. This has led to many reports and mixed media recordings being produced in Kunwinjku, including rock art site recordings, videos of elders discussing country and kinship, and technical instructional videos.

## Kunwok workshops

Steven Bird serves Nawarddeken Academy in the role of linguist, and directs the Top End Language Lab at Charles Darwin University. The Language Lab is developing new technologies to support learning and literacy for aboriginal languages.

In the wet season, Steven and two colleagues spent a fortnight at Kabulwarnamyo, working with rangers from across all bases on a range of kunwok-based activities, which included:

- Composing stories about ranger work, recording and transcribing stories
- Reviewing photos and transcribing the story of the bush trip
- Composing ranger profiles and recording profiles in English and Kunwinjku
- Transcribing recordings
- Practicing using new cameras
- Creating family trees for clans in the Warddeken IPA.



Top: A place name sign on the Bordoh clan estate. More than 250 such signs have been installed across the IPA.

Bottom left and right: Project manager Terrah Guymala works with younger rangers Arriy and Graham to show them how he stores electronic place name records within a database.



# TWO MEDICINES

-

## ONE FOR HEADACHE AND STOMACH ACHE, ONE FOR SKIN SORES

Malamalaywi ngarriwam  
ngarriyawam bush medicine.

Manbordokorr ngarriwerrkbom  
wanjh ngarrimey  
kankangehken.

Mandak dorreng.

Ngarriwerrkbom wanjh  
ngarriwerrkdoy wanjh  
ngarriyahwurdme dja  
ngarrikurrmeng kore  
mambard.

Wanjh ngarribokinje.

Ngarribongun manbordokorr  
kangurdke kunnjam dja  
kunkodj.

Ngarribomarnbun mandarrk,  
wanjh ngarriboyakarrbun  
kore tub.

Ba wurdurd  
ngarribenwurlebke, wanjh  
kunkurlah ngarribendjuhke.

Bonj

Yesterday we went to  
look for bush medicine.

We shed the skin of  
the stringybark and  
then kankangehken.

And also mandak.

We peeled the skin, we  
hit the skin, we cut  
it in small pieces then  
we put it in a metal  
container.

Then we boil it.

We drink the stringybark it  
stops pain and relaxes our  
interior organs and our head.

We make the drink of the  
plant, then we put it under  
the hose.

So that we can immerse  
children in it, and wash  
their skin.

This is all.



Everyone, Kabulwarnamyo, Jan 2021 (CDU/  
Warddeken Ecological Knowledge Workshop,  
sponsored by Indigenous Languages and  
Arts Program.

# DALUK RANGERS



Tahnee Nabalwad tightens the chain on a chainsaw during 'work ready' training in Kakadu.

The Daluk Engagement Project focuses on building a strong daluk (female) workforce and creating gender equity within our workplace. The project is built around elders and senior women who are committed to being positive female role models. Warddeken's daluk workforce ranges in age from teenagers to elders, and the project has created a diversified and flexible work program to cater to the varying interests and needs of Nawarddeken daluk.

Daluk are engaged and employed at all three ranger bases, working in many different capacities across a range of environmental and cultural programs. In a major step forward for the program, a daluk engagement officer for Mamardawerre ranger base was employed in August 2020, which has allowed the daluk rangers at Mamardawerre to become even more actively involved in managing the IPA. In late 2021, an engagement officer for Manmoyi ranger base will be recruited, which will again bolster daluk employment and engagement outcomes.

In a year characterised by widespread daluk involvement across all major work programs, it is clear that the Daluk Engagement Project continues to be a resounding success. Amongst many successes, these are just some of the stand-out highlights of the past year.

Four daluk rangers from Mamardawerre attended the Territory Natural Resource Management (TNRM) Conference in Darwin for three days. Workshops focused on efficient communication of issues related to fire. It was a highly successful trip and the rangers met and networked with many other ranger groups. There has been a lot of interest to return in 2021 and do a presentation.

## Firefighting

Daluk we involved in fire suppression activities on three separate wildfire campaigns in the IPA, demonstrating that they were more than capable of keeping up with the incredibly demanding physical work. Additionally, other daluk rangers were heavily involved in base support for firefighting crews, through cooking meals and undertaking fuel resupply.

## The Bush Tucker Diaries

This project was started in Mamardawerre, with the aim of taking senior daluk out and recording seasonal plants and tucker on a monthly basis. This information was then collated and made into a poster to share with the communities and visitors what tucker was ready that month.

## Rock Art Reporting

Daluk assisted the rock art team with preparing landowner reports. This involved writing, transcribing and translating text in Kunwinjku and English, using mapping software to create survey maps and identifying rock art icons. Reports are created for each clan group, which also exposes younger daluk to important knowledge-sets around clan and estate names, as well as smaller place names within clan estates.

## Food Security

Kabulwarnamyo daluk worked with acclaimed artist and Mok landowner Lorraine Kabbindi White, as well as children from the community, to paint filing cabinets in bush tucker and traditional themes with contemporary colours. The filing cabinets are being used as part of a trial to see if food security is enhanced by providing improved storage to keep out animals such as dogs and crows, which regularly decimate people's food supplies.

## Anbinik Protection

Daluk rangers a key role in Anbinik fire protection work across Anbinik forests at Kunbambuk, Makkalarl and Nakarriken in April and May. Rangers camped on country and were helicoptered to remote Anbinik patches with blowers and drip torches to make fire breaks around these important areas. A total of eight sites were protected by daluk rangers – an incredible effort, and one that generated an immense amount of pride.

## Rock Art

Daluk rangers accounted for 60% of all fieldwork for the Bim Project, including monitoring and maintenance of 17 known sites and survey of 10 new sites across Bolmo Dordokiyu, Mok, Djordi and Yurhmanj clan estates.

Daluk rangers at Mamardawerre initiated a junior ranger work experience program for young girls in the community. Under the current homeland learning centre arrangement, education is intermittent at best and young daluk are keen to be involved in meaningful activities. Work experience involved participation in learning on country activities such as plant and animal identification, practise operating the blowers for fire activities and participation in biodiversity surveys. Fifteen-year-old Estella Nadjamerrek, who participated in the work experience program, has stated that "being a ranger is my dream job". We plan on making sure that Estella can achieve her dream.



### Daluk Camp at Nawarlbin

The inaugural Daluk camp was held at Nawarlbin/Kulnguki on Mok clan's Mankungdjang (wild honey dreaming) estate, bringing together 30 women ranging from teenagers to elders, as well as 21 children to sit down for in-depth conversations about the customary roles of Nawarddeken daluk in managing country, and the opportunities and activities they would like to see Warddeken offer daluk rangers moving into the future.

The camp allowed the collaborative development of milestones for the 2021 work year, with input from all daluk in attendance. The camp also included cultural activities including an important but secret women's ceremony, harvesting and weaving kun-dayarr (pandanus) and fishing for turtle. With the growth and expansion of Warddeken's Daluk Engagement Project, the camp was such a huge success that a daluk camp will become an annual event for Warddeken.



Left page: A shade shelter at the inaugural Daluk Camp.  
 Left: Daluk from Mamardawerre have been documenting seasonal plants as part of the 'Bush Tucker Diaries' project.  
 Bottom left: Participants fly in from the township of Gunbalanya to join the camping festivities.  
 Bottom right: Penelope Yibarbuk uses a driptorch to back burn around an Anbinik forest.





Above: Rangers traverse a creek system on Djordi estate.

Right: Landowners take in the awesome power of the waterfall at Djurlka during a rock art survey camp.

Right page: Alio Guymala crosses the Mann River on Bolmo estate.



# KUKKU

## FRESHWATER PLACES



Nawarddeken are freshwater people. Many of our freshwater places are sacred sites and others remain important sources of bush tucker, such as fish, turtles, water chestnuts and water lilies. A number of springs, creeks and rivers are also important sources of drinking water for ranger bases and landowners spending time on country.

A range of freshwater ecosystems exist within the Warddeken IPA, encompassing vast river systems, streams, billabongs, springs and our unique and fragile perched wetlands. These aquatic habitats are important for cultural and ecological reasons and support a diverse range of freshwater species as well as many favoured bush food and medicine plants. They are also the home of creator spirits such as ngalyod (the powerful rainbow serpent) and yawkyawk (mermaids) and a number of freshwater sites have associated cultural protocols and restrictions as a result.

The single greatest threat to all freshwater places in the IPA is hooved feral animals, primarily Asian water buffalo. Since their introduction to the plateau in the 1930s they have damaged some freshwater sites beyond recognition, fouling the water and trampling the surrounding vegetation. Although the overall number of buffalo in the IPA is considerably less than in neighbouring lowland areas, the animals have a disproportionate impact on fragile upland wetland ecosystems around which they cluster during the dry season.

Warddeken has been undertaking annual aerial culls of feral animals within the Warddeken IPA since 2008, representing one of the most significant and sustained culling efforts within any protected area in northern Australia. Over time, our aerial culls have expanded in both intensity and coverage, reflecting increased support and understanding from Traditional Owners in the Warddeken IPA for culling, particularly in those areas where conflicting land uses do not exist.

# CONTROLLING FERAL ANIMALS

Over the period of 5–14 November, Warddeken engaged Jake Weigl and North Australian Helicopters to conduct aerial culling in the Warddeken IPA, following consultations with Traditional Owners to determine consent for the program.

The maintenance cull was undertaken across a targeted area of more than 180,000 hectares, focusing on the catchments of the Goomadeer, Liverpool, East Alligator, upper South Alligator, Mann and Cadell Rivers. Whilst buffalo were the primary target during culling, cattle, horses and pigs were removed opportunistically, with a total of 1907 mixed feral animals removed.

Given the tendency of buffalo in the escarpment regions to be highly concentrated around water and feed, these culls targeted those areas exclusively to maximise the impact of this cull. All animals culled were recorded with species, number and location logged in a GPS. Flight paths for culling operations were also recorded.

As in previous years, buffalo were the most numerous animals culled with the highest populations in the southern reaches of the IPA. Whilst overall populations remained low, those areas of the IPA that have been consistently culled since 2008 (Goomadeer and Liverpool catchments) had significantly fewer animals present with a noticeable improvement in environmental condition when compared to more recently established cull areas. Cattle, horses and pigs were also culled opportunistically, but were not the primary focus of the cull.

Throughout the duration of the cull, ground teams attended cull locations where possible to cut up and retrieve meat. This meat was then delivered to Traditional Owners in Kabulwarnamyo, Marlkawo, Manmoyi, Mamardawerre, Maningrida, Jabiru, Gunbalanya and Barunga. The distribution of meat is an important component of maintaining support for culling activities and ameliorating some wastage where possible.

## Aerial

**1,907 Total feral animals aerially culled**  
**80 Helicopter hours**  
**1,624 Buffalo (aerial)**  
**63 Cattle**  
**33 Horses**  
**187 Pigs**

## On ground

**429 Total feral animals culled on ground**  
**289 Buffalo**  
**140 Pigs**

The greatest single challenge for feral animal management in the Warddeken IPA is accessing reliable annual funding to undertake aerial culling operations. Consistency is necessary to maintain low populations across vast landscapes. This is compounded by the ongoing pressure of migration to culled areas from less managed herds to the south of the Warddeken IPA.

Additional to the aerial cull, on ground shooting throughout the year removed 289 buffalo – the great majority of which were butchered, with meat distributed at outstation communities. Buffalo meat is a staple in the diet of most outstation residents and contributes to food security in the IPA.

Warddeken IPA feral animal management has led to significant improvements in both the quality of the natural environment, particularly in freshwater ecosystems and associated riparian zones, as well the remaining buffalo observed by rangers being healthier and better sources of food.



Top and bottom: Rangers butcher buffalo during culling works. The meat will be distributed to communities within the IPA.







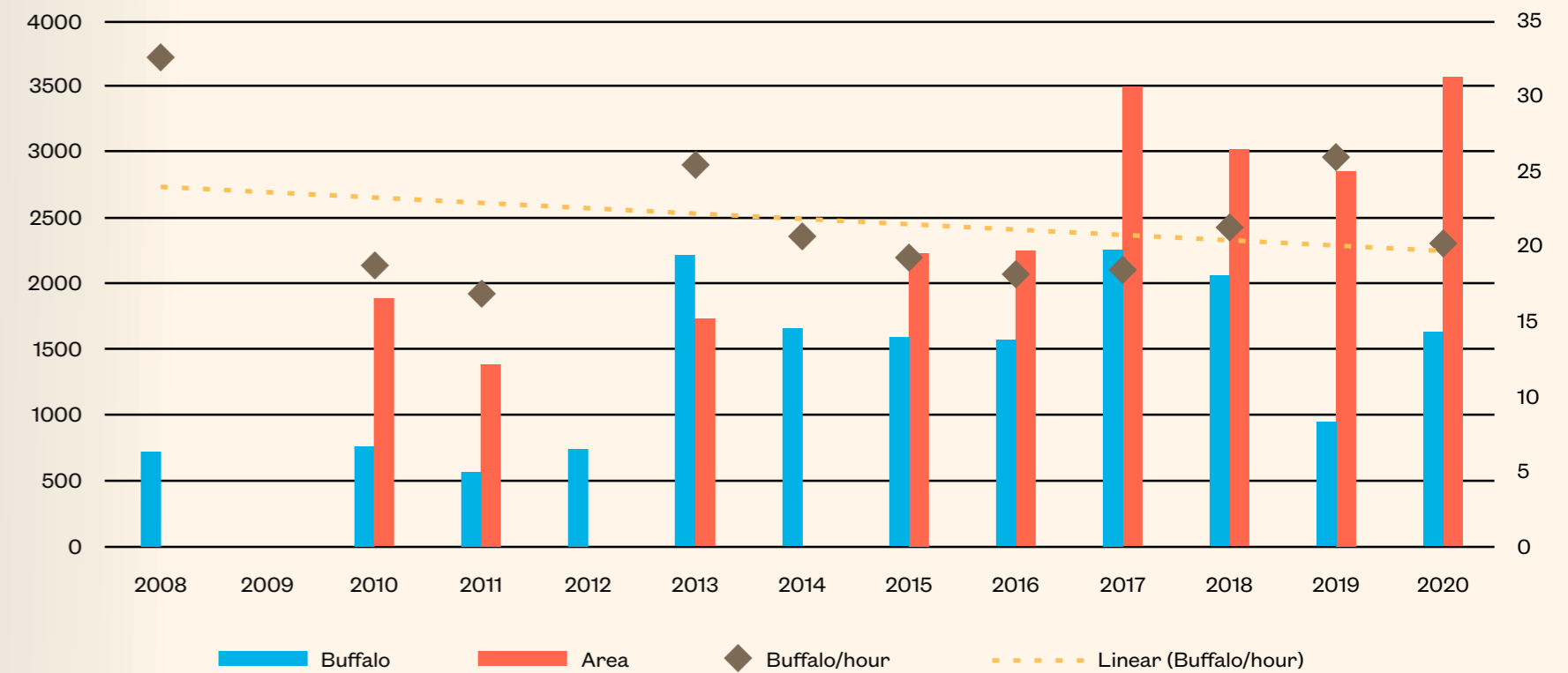
Buffalo (*Bubalus bubalis*) cause a multitude of problems for country and people, both in the Warddeken IPA and more broadly across northern Australia. Introduced to the Northern Territory in the early 19th century, buffalo quickly established feral populations in coastal and freshwater habitats.

Our aerial culling program is the longest-running buffalo control program in Australia, commencing in 2007 and involving at least one 10-day cull each year.

We have steadily increased the area culled whilst maintaining low numbers in those areas previously culled. This is demonstrated through an ongoing reduction in the number of Buffalo culled each hour at the same time as the area is growing (figure 1). When culling commenced in 2008 the buffalo per hour culled was more than 32 representing dense unmanaged herds. Culling now typically returns between 18 and 25 buffalo per hour dependant on the inclusion of new, uncultured areas within the program in that year.

Of particular note is the impact of culling in the head waters of the Goomadeer river. Early culls typically removed hundreds of Buffalo annually, now, culling efforts remove less than 20 animals each year.

### Buffalo Culling - WIPA



Historic culling performance in the Warddeken IPA. Note that no culling was conducted during 2009 due to the death of Wamud Namok and culling effort was not available for 2012.

# SUPPRESSING WILDFIRE

Although slightly less demanding than the previous two years, the 2020 late dry season proved to be another relentless and challenging season of wildfire suppression for Warddeken. Rangers began firefighting on July 28 and continued to put out fires across the IPA for the next five months, with teams suppressing a total of 45 fires between commencement of the season until its conclusion on December 13, when the wet season set in.

The ignition source of each fire ranged from people burning during fishing and hunting activities, early dry season aerial burns that flared up again from smouldering logs, to lightning strikes. Rangers and coordinators worked tirelessly to ensure the fires were completely extinguished, toiling under trying weather conditions and within very hostile terrain. Despite all of these challenges, every fire was successfully dealt with.

Warddeken rangers worked alongside our neighbours from the Bawinanga (Djelk) rangers for ten days in November to contain a wildfire in the Mangkorlod region. Despite extreme weather conditions throughout this campaign, rangers worked proudly alongside each other to extinguish the fire. Our team also worked with the Njanjma rangers to control a wildfire in the Mikkinj Valley region.

It was extremely exciting to see nine of our daluk rangers join five wildfire suppression campaigns this season – it is hoped that both these numbers will increase markedly in 2021 as more daluk complete training and build their firefighting skills and confidence.

The perseverance and hard work of our rangers proved effective in restricting the total area burnt by late dry season wildfires to only two per cent of the IPA – a strong outcome considering the severity of the season. Proof of the professionalism and expertise of our team in delivering fire management programs is that significant improvements continue to be made with all measures relating to extent and impact of severe wildfires on Warddeken project area.

**45 fires fought**  
**550.7 helicopter hours**  
**4802 ranger hours**  
**67 staff involved**



Left: Rangers work a mineral earth firebreak, using backpack leaf blowers to push back flames to within the burnt area.

Right: Maps courtesy of Jay Evans from Darwin Centre for Bushfire Research.

## FIRE HISTORY



### Mapping change

Constructed utilising primarily Landsat data (30 x 30m resolution) supplemented with AVHRR (1.1 x 1.1km) and MODIS (250 x 250m) derived sources where cloudy weather conditions necessitated. From 2016 the majority of all fire mapping utilises Sentinel-2 data (20 x 20m). Fires occurring during the early dry season (1 January - 31 July) are presented in green, while those occurring during the late dry season (1 August - 31 December) in red. Thank you to Jay Evans from Darwin Centre for Bushfire Research (DBCR) for the imagery.

# WEED CONTROL

Although the Warddeken IPA is comparatively weed free when compared to surrounding areas, there remain a number of weed species of concern, and consistent and vigilant weed control efforts are imperative to ensuring these weed infestations are managed.

Our weed control programs aim firstly to prevent the spread of weeds, which can occur easily via vehicles, animals (feral and native) and wet season flooding, as well as working steadily toward the eradication of certain invasive weed species.

Invasive species targeted are annual mission grass, perennial mission grass, mimosa, rattlepod, hyptis, sida, caltrop, gmelina, neem and gamba grass. Rangers are always on the lookout for other species posing a threat to biodiversity within the IPA.

The logistics of wet season weed works involves much preparation as wet season conditions prohibit travel via road and require rangers to travel by helicopter to various outstations within and surrounding the Warddeken IPA. Vehicles with dual spray units are shuttled out at the end of each dry season to shipping containers strategically placed throughout the IPA to allow access to outstations and areas with the worst infestations. A quad bike with a 100L spray unit is placed at Kudjekbinj and is kept in a smaller shipping container. In addition, swags, tents, hydration packs, as well as herbicide, fuel and PPE are kept in containers for rangers to access as needed throughout the wet season.

In early 2021, as part of the annual wet season weed control program, grassy and environmental weed management occurred at homeland communities across the IPA. Due to time constraints and staff resourcing issues, the program was not as expansive as it has been in previous years, and will require additional focus and effort in the upcoming wet season to ensure we remain on top of these infestations. Rangers were able to travel to the following communities to tackle weeds: Kabulwarnamyo, Manmoyi, Kudjekbinj, Mamardawerre, Kumarrirnbang, Marlwon, and Table Hill.

Weed infestations along roadsides between the communities of Kabulwarnamyo, Marlkawo and Manmoyi were also treated during the wet season to good effect.



It's always good working alongside our neighbours at Bawinanga (Djelk) Rangers to look after country that is important to both our ranger groups, particularly in areas where the boundary of our respective IPAs overlap. For many years, traditional owners and rangers from both ranger groups have requested Warddeken and Bawinanga work in partnership to treat weed infestations in our shared zone. In February 2021, rangers negotiated wet season road conditions to come together and control weeds at homeland communities and along tracks and roads in the shared zone of the Djelk and Warddeken IPAs. This important work not only treats existing infestations, but ensures that weeds aren't spread by passing vehicles when the roads open up.



Left page: Manoah tackles a roadside weed infestation. Above: Warddeken and Bawinanga rangers worked together to tackle weeds in the shared region of our IPAs. Left: QuikSpray units allow rangers to effectively spray weeds along roadsides.

# KUNRED COMMUNITY



As one of only a handful of organisations in Australia based exclusively at homeland communities, Warddeken are deeply committed to supporting and advocating for Nawarddeken who choose to live on outstations. We recognise that life in the bush is even more challenging than ever for indigenous people and, where possible, we work alongside communities to increase access, improve environmental health and ensure sustainable futures on country.

Warddeken are the registered Homelands Service Provider for Kabulwarnamyo, and we work closely with Demed Aboriginal Corporation who provide services for the people of Mamardawerre, Manmoyi and other communities within the IPA.

## Kabulwarnamyo infrastructure upgrades

In 2019, we were successful in our application to the Aboriginals Benefit Account (ABA) for funding to upgrade the solar power system at Kabulwarnamyo and sink a water bore to provide an improved water source for the community. These upgrades were completed in late 2020, and have already enhanced the living conditions of rangers, families and community members living at Kabulwarnamyo.

## Solar system

Back in 2010, Kabulwarnamyo's first power system was installed, which for the very first time allowed rangers and their families to use refrigerators and washing machines, vastly improving their quality of life. However, after ten years, with the original system pushed beyond capacity and at the end of its lifespan, we had been urgently seeking a replacement, and were relieved when ABA funding was secured.

In October 2020, a new solar system was installed at Kabulwarnamyo (including replacement of the ageing battery bank), which now means the energy output meets the needs of the growing community of Kabulwarnamyo.

## Water bore

Community members at Kabulwarnamyo – Historically, Kabulwarnamyo community drew its water from a spring system using a firefighting pump, collecting surface water with the potential to make people ill. Water infrastructure was no longer meeting community needs, particularly in the late dry season when the intense heat leads to increased water usage.

With ABA funding, a professional driller was engaged to sink a water bore, and Mok Traditional Owners were thrilled when water was struck on the first attempt at sinking a bore. Not only did we hit water – the flow rate of this pristine water is a pumping four litres per second!

Mary Kolkiwarra Nadjamerrek, stone country professor and matriarch of Kabulwarnamyo, gave her official seal of approval to the community's new bore.

## Nawarddeken Academy playground

Community members at Kabulwarnamyo – in particular the students of Nawarddeken Academy – have been requesting a community playground in the vicinity of the school, and over the last two years rangers, builders and even students of Nawarddeken Academy have been working on installation of an exciting adventure playground. A new 'big kids' slide and climbing tower has been installed over the last year, which is a hit with older students (and also some 'young at heart' rangers!).

## Mechanical works

A dedicated trained diesel mechanic has been stationed at Kabulwarnamyo ranger base since 2015, to oversee the incredibly important job of maintaining and repairing Warddeken's fleet of vehicles, plant machinery and equipment such as leaf blowers, chainsaws and generators.

Rangers regularly work alongside the Warddeken mechanic at Kabulwarnamyo, Manmoyi and Mamardawerre communities. Rangers who express a particular interest in mechanics are supported to spend as much time as they like working directly with the mechanic to improve their skills and training. With Manmoyi ranger base now having its own workshop equipped with a mechanical hoist, mechanic Anthony has been spending an increased amount of time working alongside Manmoyi rangers, improving their mechanical skills.

## Food security

IPA communities are many hours' drive from the nearest store and all food supplies must be transported into the community which is hard at the best of times, and particularly difficult in the wet season when there is no road access. With private vehicles few and far between, and air charter costs prohibitive to individual families, in the past this has caused massive food insecurity across all communities within the Warddeken IPA.

With the support of Karrkad Kanjdji Trust and Simplot, for the previous seven years Warddeken has addressed this issue by providing a fortnightly food delivery service via charter plane to each of our three ranger bases, free of charge. Rangers and community members are supported by Warddeken administrative staff to place and pay for orders from Jabiru Foodland supermarket in neighbouring Kakadu National Park. Staff from Foodland pack each order, with pilots from charter company Kakadu Air then loading them into small aircraft and delivering them to each IPA community. This service is a critical component of regional service provision' one which offers Nawarddeken Traditional Owners the security of a regular source of food.

Clockwise from top left:

New, colourful, cultural signage for the Kabulwarnamyo airstrip.

Rangers prepare to depart for a pre wet season supply run.

Painting the new airport signage.

Senior landowner Keith Nadjamerrek is all smiles after the successful sinking of a new bore at his community of Kabulwarnamyo.

# NAWARDDEKEN ACADEMY



With the help of the Karrkad Kanjdji Trust, in 2015 the community of Kabulwarnamyo established the Nawarddeken Academy, a unique bicultural school where a culturally specific curriculum is developed in partnership with community elders and taught in tandem with the Australian Curriculum.

For many years, rangers and their families lobbied for education to be delivered on country so they would not have to leave their children with family in larger towns. Elders and parents dreamed of two-toolbox education to make their children strong in two worlds – bininj and balanda. This dream was realised in 2015 when, with the generous support of the Karrkad Kanjdji Trust and Gunbalanya School, the Nawarddeken Academy was established at Kabulwarnamyo, providing bicultural education for school aged children.

The Kabulwarnamyo community has joint ownership of Nawarddeken Academy and actively oversees the direction of the school and participates in the education of its children on a daily basis. What began as a one-teacher classroom under a tarp, with minimal resources, has grown into a school that can cater for over 20 students with two permanent teachers, five casual indigenous teaching assistants, an Executive Officer and an early learning program that caters for children from zero to five-years-old.

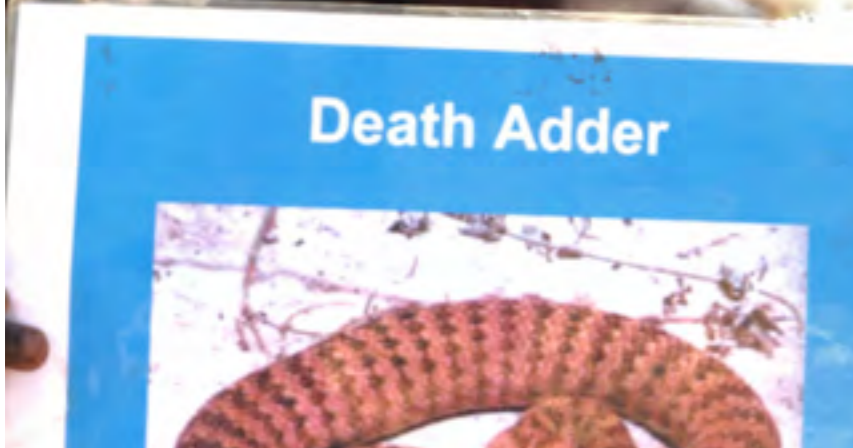
The Academy is focused on empowering young people to be strong and confident; preserving Nawarddeken languages and culture through bilingual and bicultural experiential learning; and promoting intergenerational education. The school enables indigenous ranger jobs to be created and retained because children are able to be educated at home, on country.

Nawarddeken Academy's Kabulwarnamyo campus gained Independent School Registration in December 2018. Registration brings recurrent government funding that secures the financial future of the Academy, and more importantly provide Kabulwarnamyo children with the education they deserve. Two new applications for independent school registration for Nawarddeken Academy campuses at the communities of Manmoyi and Mamardawerre are currently under consideration by the NT Government's assessment panel. We are hopeful that these applications will also be successful, and allow full-time education to begin across all IPA communities by 2022.

Our bicultural education approach engages indigenous leaders, rangers and skilled teachers to provide a holistic approach to teaching and learning. The future of Nawarddeken depends on our children learning to live, work and thrive within two knowledge systems, and this forms the foundation of our educational philosophy.



Anthony during a literacy lesson.



Clockwise from top left:  
 Students and teachers pose with the new uniforms.  
 Kerrida at an occupation and art site during a survey camp.  
 Delsanto uses traditional painting skills learned the previous year at the Academy. He has shown an interest in and aptitude for customary painting technique.  
 Students pose with a NAIDOC banner.  
 Masari with a photo of bek (death adder), which is one of the dreaming sites on her Bordoh clan estate.



Above: Students at the Kabulwarnamyo campus are lucky enough to be able to swim year-round in the spring.

Right: The new uniform includes this depiction of a Wakkewakken honey spirit being, by the eminent leader Bardayal Lofty Nadjamerrek. Wakkewakken have no body below the waist and are associated with sacred sites in the Mok clan's Mankung Djang (native honey dreaming) estate.

Right page: Daluk rangers and monitoring officer Cara work with students to deploy motion sensor camera traps for monitoring biodiversity around the community.



Throughout 2020-21, Nawarddeken Academy continued delivering a strong, locally driven program of bicultural education. These are some highlights from the last year.

### Bush Trips

Regular bush trips allow students to harvest, prepare and, most importantly, eat bush foods across the six seasons of the kuwarddewardde. A bicultural bush school is all about getting out on country, learning from elders and having fun, and lessons utilising this philosophy of education continue to be delivered with regularity.

### Seasonal Calendar

The seasonal calendar has been the focus of bush trips this year. When on bush trips, students learn about the country we are visiting – which clan estate we are on and how each student is connected to that country. Professor Mary Kolkiwarra Nadjamerrek has accompanied us on many bush trips where she shares stories about the seasons at, before teaching us how to collect and cook foods.

### Rock Art Camp at Ngaldadubbe

Nawarddeken Academy and the Bim program partnered to host a camp with 18 children to facilitate on country exchange of knowledge and language. Additionally, a Nabiwo Djang (honey dreaming) gathering was held during school holidays in July 2021. This brought in 50 people to Kabulwarnamyo, including 30 Children. A strong program of cultural activities occurred including passing on knowledge about various Mok clan djang, weaving, bush tucker and medicine.

### Wakkewakken

At the beginning of 2020, the community worked with incoming teachers Adelaide and Jodi to design a new Nawarddeken Academy uniform. On the back is a beautiful image of the Wakkewakken by Bardayal 'Lofty' Nadjamerrek, which is the Mankung Djang (Sugar Bag Dreaming) of Kabulwarnamyo.

### Storytelling

Have you ever wondered why turtles have shells and echidnas have spikes? Students learned dreaming stories such as these, which teach important lessons and explain how the world as we know it came into being.

### Biodiversity Monitoring

The Academy went on bush trips with daluk rangers and Cara, the Warddeken ecologist, to set motion sensor camera traps to monitor mammals close to Kabulwarnamyo. Students learnt how to clear breaks around the camera and used their maths skills in measuring distances between the cameras and the baits.

### Mathematics

In Maths, we developed our addition skills such as counting on, double digit addition and friends of 10. For the younger students, we have been working on learning the numbers 6 to 10 and understanding their value.



# NGAD NAWARDDEKEN

## OUR PEOPLE

### Staff



**Shaun Ansell**  
CEO



**Dean Yibarbuk**  
Fire Ecologist and Mentor



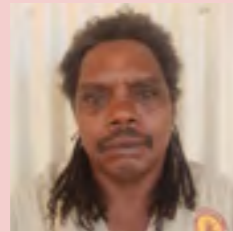
**David Arthur**  
CFO



**Freddy Nadjamerrek**  
Senior Ranger



**Terrah Guymala**  
Senior Ranger



**Greg Lippo**  
Senior Ranger



**Elizabeth Nabarlambarl**  
Senior Ranger



**Arlo Meehan**  
Kabulwarnamy Ranger Coordinator (Incoming)



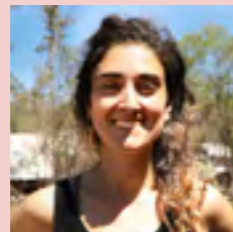
**Torsten Unnasch**  
Mamardawerre Ranger Coordinator



**Harry McDermott**  
Manmoyi Ranger Coordinator



**Dr Cara Penton**  
Ecological Monitoring Officer (Incoming)



**Dr Claudia Cialone**  
Rock Art Project Manager



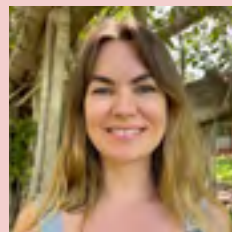
**Chester Clarke**  
Rock Art Project Officer



**Celina Ernst**  
Daluk Engagement Officer  
Kabulwarnamy



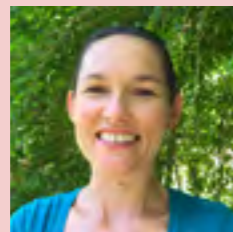
**Stella Thomas**  
Daluk Engagement Officer  
Mamardawerre



**Lauren Hicks**  
Administration Officer (Incoming)



**Anthony Nicholls**  
Mechanical Services Officer



**Olga Scholes**  
Nawarddeken Academy EO

### Outgoing Staff

- Strath Barton  
Kabulwarnamy Ranger Coordinator
- Alys Stevens  
Ecological Monitoring Officer
- Bianca Twaddle  
Administration Officer

### Daborrabolk – Senior Cultural Advisors



**Lillian Guymala**



**Deborah Nabarlambarl**



**Wurdib Nabalwad**



**Berribob Dangbungala Watson**



**Mary Kolkiwarra**  
Nadjamerrek



**Josie Maralngurra**



**Leanne Guymala**

### Thanks to Our Dedicated Team of Rangers

#### Bininj Rangers

Robert Balmana, Marshall Bangarr, Jamie Billis, Jakah Billis, Zaavian Billis, Joseph Brown, Kevin Bulliwana, Eldrick Bush, Marcus Cameron, Eamon Cooper, Duane Dakgalawuy, Robert Dirdi, Esau Djandjomerr, Jonathan Djogiba, Hector Djorlom, Lachlan Djumberri, Elkanah Dullman, Zecchaeus Garlmgarr, Joshua Garnarradj, Vernon Garnarradj, Dennis Gayoso, Frazer Girrabel, Anthony Gumurdul, Silvaris Gumurgal, Austin Aljo Guymala, Casten Guymala, Jenkin Guymala, Leon Guymala, Mario Guymala, Raymond Guymala, Richie Guymala, Ross Guymala, Stuart Guymala, Terrah Guymala, Zario Guymala, Fred Hunter, Jesse Hunter, Kamahl Hunter, Oscar Jumbirri, Ezariah Kelly, Greg Lippo, Karl Makin, Kurt Managku, Kenneth Mangiru, Canon Manyita, Conrad Maralngurra, Darius Maralngurra, Maath Maralngurra, Melchizedek Maralngurra, Nick Maralngurra,

Maacka Marlibirr, Richard Miller, Cade Morrison, Arijay Nabarlambarl, Anthony Nabarlambarl, Mitchell Nabarlambarl, Reon Nabarlambarl, Ricky Nabarlambarl, Willie Nabarlambarl, Ackim Naborlhborlh, Alfie Naborlhborlh, Joel Naborlhborlh, Joson Naborlhborlh, Kingston Nabarlambarl, Lewis Naborlhborlh, Melechi Naborlhborlh, Rodney Naborlhborlh, Winston Naborlhborlh, Enosh Nadjamerrek, Frankie Nadjamerrek, Frederick Nadjamerrek, Jai Nadjamerrek, Keith Nadjamerrek, Ray Nadjamerrek, Clifton Nagurrgrurba, Alfred Nalorlman, Anderson Nalorlman, Cody Namandja, Emmanuel Namarnyilk, Graham Namarnyilk, Shaun Namarnyilk, Terrance Namarnyilk, Zacharia Namarnyilk, Charlton Namundja, Ashton Narorrnga, Manoah Nawilil, Taran Nawilil, Cain Naydwana, Jimmy Nayilbidj, Nicodemus Nayilbidj, Zebalan Nayilbidj,

Garrett Pamkal, Lesley Phillips, Romeo Redford, Johnny Reid, Anthony Sullivan, Berribob Watson, Clayton Watson, George Watson, Sebastian Wesley, Lindsay Whitehurst, Brendan Wilson, Steven Wilson, Esmond Wood, Jayden Wurrkidj, Jarris Wurrkidj, Dean Munuggillumurr Yibarbuk, Dwayne Yibarbuk, Jamie Yibarbuk, Randy Yibarbuk

#### Daluk Rangers

Anne Marie Ahwon, Courtina Ahwon, Christine Alangale, Mavis Alangale, Priscilla Badari, Sylvia Badari, Bianca Balmana, Elizabeth Bangarr, Michelle Bangarr, Vietta Bangarr, Sarah Cooper Billis, Delvina Boko, Kyrin Bulliwana, Megan Bulumbara, Shona Carter, Joylene Cameron, Linda Codgen, Sharna Dakgalawuy, Samantha Deegan, Antonia Djandjomerr, Christianna Djandjomerr, Shirley Djandjomerr, Dorita Djorlom, Mavis Djumberri, Bernadette Dooley, Gillian Galaminda, Kaywana Gamarrwu, Carmen Garnarradj, Tana Girrabel, Ashalina Guymala, Asheena Guymala, Aspelita Guymala, Jeraiah Guymala, Leanne Guymala, Margaret Guymala, Devita Hodgson, Fiona Lawrence, Hilda Ahwon Lee, Kelsia Lee, Gabriella Maralngurra, Josie Maralngurra, Lorina Maralngurra, Edna Midjarda, Deborah Nabarlambarl, Elizabeth Nabarlambarl, Maylene Nabarlambarl, Ricain Nabarlambarl, Ruth Nabarlambarl, Rosie Nabegeyo, Janine Nabegeyo, Milly Naborlhborlh, Roxanne Naborlhborlh, Serita Naborlhborlh, Wynita Naborlhborlh, Adda Nabalwad, Chantel Nabalwad, Lorna Nabalwad, Rosemary Nabalwad, Susan Nabalwad, Suzannah Nabalwad, Tahnee Nabalwad, Donna Nadjamerrek, Drusilla Nadjamerrek, Faith Nadjamerrek, Jenny Nadjamerrek, Lois Nadjamerrek, Mary Nadjamerrek, Naomi Nadjamerrek, Rhonda Nadjamerrek, Lynne Nadjowh, Colleen Nagurrgrurba, Diane Nalorlman, Janice Nalorlman, Margaret Nabalwad Nalorlman, Treanne Nalorlman, Alexandria Namarnyilk, Emma Namarnyilk, Georgina Namarnyilk, Justina Namarnyilk, Leanne Namarnyilk, Lorraine Namarnyilk, Serina Namarnyilk, Theona Namarnyilk, Wendy Namarnyilk, Christella Namundja, Latoiya Namundja, Merry! Namundja, Yvette Namundja, Evelyn Narorrnga, Jody Narorrnga, Tinnasha Narorrnga, Eliza Nawirridj, Carol Nayilbidj, Deriya Naydwana, Ashley Nayilbidj, Molly Nayilbidj, Connie Nayinggul, Carol Pamkal, Catherine Ralph, Jill Roberts, Scholastica Waldock, Karen Watson, Lorraine Kabbindi White, Cammie Wood, Toni Whitehurst, Kara Wurrkidj, Bernadette Yibarbuk, Penelope Yibarbuk, Gina Yulidjirri



# THE KARRKAD KANJDJI TRUST



Karrkad Kanjdji is the Kunwinjku name given to us by our founders, the Traditional Owners of the Warddeken and Djelk Indigenous Protected Areas.

It refers to the stone country highlands and savanna lowlands of Arnhem Land that we work together to protect.



Stacey Irving, KKT CEO

The Karrkad Kanjdji Trust (KKT) was founded by visionary people alongside the establishment of the Warddeken and Djelk Indigenous Protected Areas. Our aim is to protect, restore and enhance the natural environment of west and central Arnhem Land. We do this by bringing together philanthropists and ranger groups to address some of the region's most pressing issues.

Reflecting the priorities of our partners, we take a holistic approach to conservation. Each project we fund is community owned and strengthens the ability of Indigenous people to manage their natural and cultural assets. Broadly, our support enables people to live and work on country by implementing programs focusing on native biodiversity, women rangers, cultural heritage, climate change, bicultural education, and community sustainability.

Thanks to the generosity of Karrkad Kanjdji Trust supporters, we granted almost \$1,500,000 to Warddeken and the Nawarddeken Academy in the 2020-2021 financial year and secured further funding for 2022 and beyond.

### In a year with many highlights, we were thrilled to fund:

- The establishment of the women's ranger team at the Mamardawerre ranger base, growing from its successful beginnings at Kabulwarnamyo in 2016.
- The second year of a coordinated effort to survey and protect the rock art galleries of the Warddeken Indigenous Protected Area.
- The development of the Kuwarddewardde Malkno (stone country seasonal calendar) and the Indigenous Language and Culture Curriculum for the Nawarddeken Academy.
- Fine-scale fire management implemented to protect remnant patches of anbinik rainforests.

With the support of Warddeken, we are growing our reach within the region. Our philanthropic funding for Mimal Rangers, neighbours to the south, is increasing and we are also now partnering with ALFA (NT) and the Adjumarlarl Rangers.

It is a privilege to work together with Warddeken. For more information or to donate to their work, please visit [kkt.org.au](http://kkt.org.au)

# OUR PARTNERS

Thanks to our many supporters and partners



# EXTRACT FROM FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2021

## Independent Auditor's Report to the members of Warddeken Land Management Limited

### Report on the Audit of the Financial Report

#### Opinion

We have audited the financial report of Warddeken Land Management Limited (the "Company"), which comprises the statement of financial position as at 30 June 2021, statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion the accompanying financial report of Warddeken Land Management Limited, is in accordance with the requirements of Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012* and the *Corporations Act 2001*, including:

- (a) Giving a true and fair view of the Company's financial position as at 30 June 2021 and of its financial performance for the year then ended; and
- (b) Complying with Australian Accounting Standards to the extent described in Note 1 to the financial report and the *Corporations Regulations 2001* and the *Australian Charities and Not-for-profits Commission Regulation 2013*.

#### Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Company in accordance with the auditor independence requirements of the *Australian Charities and Not-for-profits Commission Act 2012* and the *Corporations Act 2001* and the ethical requirements of the Accounting Professional & Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Emphasis of Matter - Basis of Accounting

We draw attention to Note 1 to the financial report, which describes the basis of accounting. The financial report has been prepared for the purpose of fulfilling the Directors financial reporting responsibilities under the Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012* and the *Corporations Act 2001*. As a result, the financial report may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

#### Other Matter

The financial report of the Association for the year ended 30 June 2021 was audited by another auditor who expressed an unqualified opinion on the financial report on 13 November 2020.

#### Directors' responsibility for the Financial Report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view – in accordance with Australian Accounting Standards to the extent described in Note 1, the *Corporations Act 2001* and the *Australian Charities and Not-for-profits Commission Act 2012* and is appropriate to meet the needs of the members. The directors are also responsible for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intends to liquidate the Company or to cease operations or has no realistic alternative but to do so.

#### Auditor's responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by those charged with governance.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the directors and management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.



#### NEXIA EDWARDS MARSHALL NT CHARTERED ACCOUNTANTS

Level 2 TCG Centre  
80 Mitchell Street  
Darwin NT 0800



#### NOEL CLIFFORD

Partner

Dated 22nd October 2021

## Statement of Profit or Loss and Other Comprehensive Income

	2021 \$	2020 \$
<b>REVENUE AND OTHER INCOME</b>		
Grant Income	2,770,265	2,356,928
Contract Revenue	1,332,044	1,321,560
Donations - Project Income	1,831,898	1,148,148
Interest Received	280	673
ATO Cash Flow Boost	37,500	62,500
Other Income	150,084	167,358
Total Operating Revenues	6,122,071	5,057,167
<b>OPERATING EXPENSES</b>		
Employee Benefit Expenses	2,575,708	1,833,810
Depreciation Expenses	216,102	417,242
Other Expenses	2,616,338	2,241,881
Total Operating Expenses	5,408,148	4,492,933
Profit (Loss) for the year	713,923	564,234
Other Comprehensive Income	-	-
Total Other Comprehensive Income	-	-
Total Comprehensive Income (Loss) for the year	713,923	564,234
Net Current Year Profit (Loss)	713,923	564,234
Attributable to Members of the Entity		
Total Comprehensive Income (Loss) Attributable to Members of the Entity	713,923	564,234

## Statement of Financial Position

	2021 \$	2020 \$
<b>ASSETS</b>		
<i>Current Assets</i>		
Cash and Cash Equivalents	1,500,415	1,152,392
Trade and Other Receivables	467,610	200,636
Total Current Assets	1,968,025	1,353,028
<i>Non-Current Assets</i>		
Property, Plant and Equipment	1,662,801	1,355,750
Total Non-Current Assets	1,662,801	1,355,750
Total Assets	3,630,826	2,708,778
<b>LIABILITIES</b>		
<i>Current Liabilities</i>		
Trade and Other Payables	368,751	289,999
Employee Provisions	244,341	114,968
Total Current Liabilities	613,092	404,967
<i>Non-Current Liabilities</i>		
Employee Provisions	-	-
Total Non-Current Liabilities	-	-
Total Liabilities	613,092	404,967
Net Assets	3,017,734	2,303,811
<b>EQUITY</b>		
Retained Earnings	3,017,734	2,303,811
Total Equity	3,017,734	2,303,811

# IN MEMORIAM

## NGARRIDJDJAN NGAL - DJALAMA 1950 - 2021

**The past year has not been without sadness and grief. Our entire organisation mourned the sudden and tragic loss of one of our esteemed professors, Ngarridjjan Ngal-Djalama.**

Ngarridjjan was a driving force in establishing the Mamardawerre rangers, and we were so lucky to have been able to draw on her wisdom to guide work our programs.

She was also a staunch supporter of establishing a school at Mamardawerre to offer quality, full-time education to the children of Mamardawerre. She will be loved and missed always, and her legacy will live on.

We pay tribute to Ngarridjjan and her contribution to caring for the kuwarddewardde, and we extend our deepest sympathy to her families.



# DEDICATION

## BARDAYAL LOFTY NADJAMERREK OAM 1926 - 2009



**Yakkake Wamud Namok, djorrbayeng, ngundimanjbun rowk bu kanbukkabukkang ngadberre angarre nawarddeken, kankangemang ngadberre Wamud.**

Wamud of the Mok clan, in whose special clan language we use the Mok clan word 'yakkake'— our dear friend.

We all thank you for everything you have taught us, the culture and way of life from the rock country. Our hearts cry out to you Wamud.

**Munguyhmunguyh ngarridjalbengkan ngudda.**  
We shall forever think about you.

**Kunmalng ke karrurdeng kore Ankung Djang, kore Djabidj Bakoluy, kore Kundjorlomdjorlom, Nabiwo Kadjangdi, Ankung Kangeyh, Kabulwarnamyo, kore "the dear one".**

Your spirit will return to the Honey Dreaming sacred places, to Djabidj Bakoluy, to Kundjorlomdjorlom and Nabiwo Kadjangdi, to Ankung Kangeyh and Kabulwarnamyo, the place you referred to as "the dear one".

You Wamud will always be our "dear one".

# OUR FUTURE

As we move into the next ten years, we remain deeply committed to keeping the kuwarddewardde healthy, and ensuring Nawarddeken culture stays strong.

We will:

Expand our keystone land management programs to enhance cultural and environmental outcomes

Maintain our bininj-led governance structures

Assist Nawarddeken from a greater number of clans to spend time on country

Increase bininj employment and strive for workplace equity

Advance education opportunities for children living on outstations

Most importantly, we will stay true to the vision of our Professors, and pass this vision on to our children.



Our future, right here. Kerrida Namarnyilk poses proudly in her father's work shirt.  
Back cover: An ancient, majestic Anbinik tree.



“IN THE TEN YEARS SINCE THE DECLARATION OF THE WARDDEKEN INDIGENOUS PROTECTED AREA, OUR RANGERS HAVE WORKED TIRELESSLY TO PROTECT THE STONE COUNTRY OF WESTERN ARNHEM LAND. OUR OLD PEOPLE WOULD BE SO PROUD OF WHAT WE HAVE ACHIEVED AS BININJ WORKING TOGETHER.”

— DEAN YIBARBUK, CHAIRMAN

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