

WARDDEKEN ANNUAL REPORT 2023 - 24



NGARRIDJARRKBOLKNAHMAN KUNRED

LOOKING AFTER COUNTRY TOGETHER



The bidbimyo (hand stencil) at the centre of the Warddeken logo is that of Warddeken's founder and patron, Bardayal Lofty Nadjamerrek AO (1926-2009). Our logo reminds us that it was his guiding hand that led the land management movement in west Arnhem Land.

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Front cover: Terrah Guymala is one of Warddeken's most senior rangers, in addition to being a company director. In the late wet season, Terrah worked with the Mayh Program to undertake specialised burning at sites identified as prime habitat for threatened fauna including white-throated grasswrens and a range of small mammals. © Kane Chenoweth

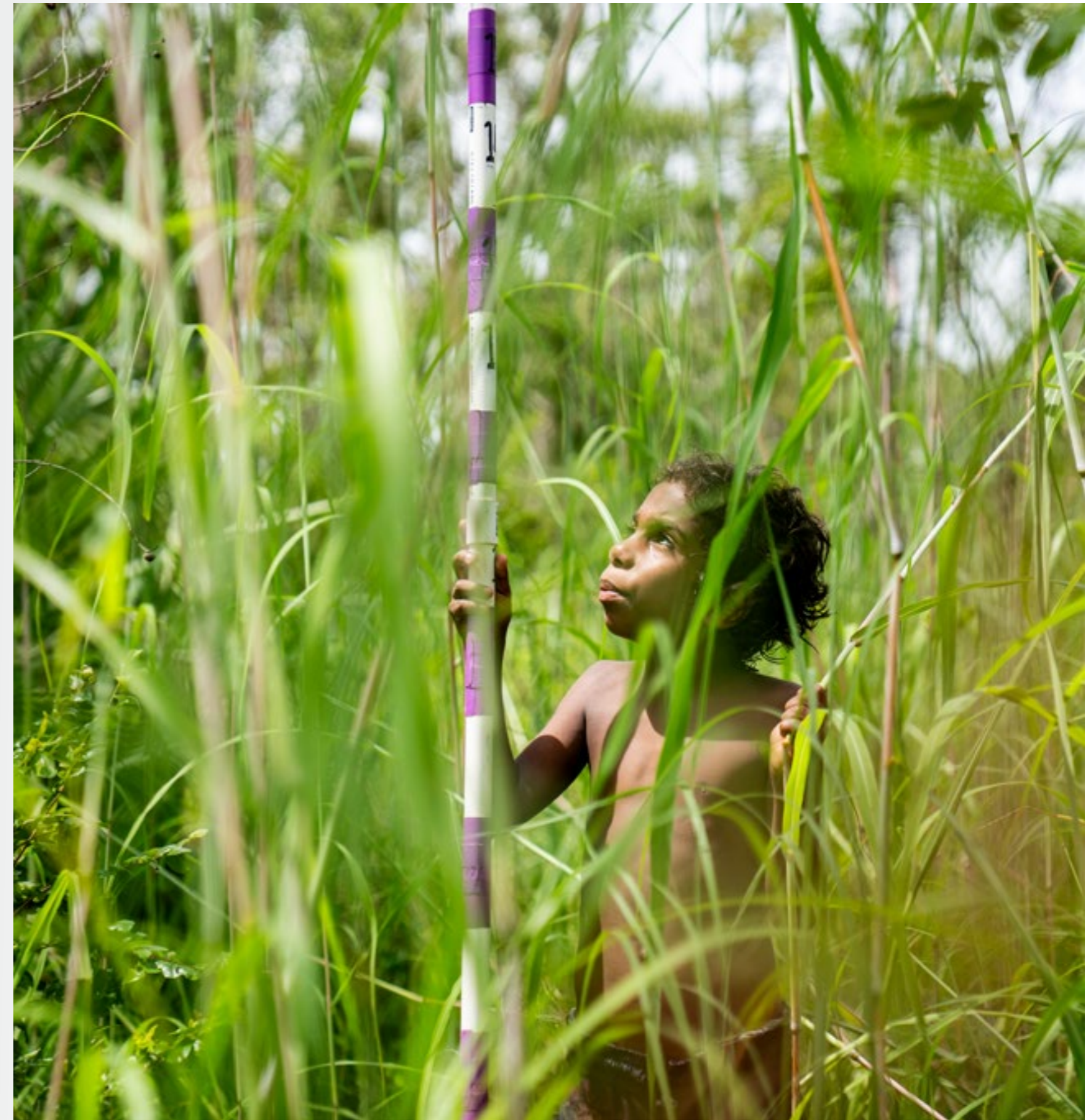
Right: Crayden Makin, a student from the Manmoyi Nawarddeken Academy, worked alongside his parents during habitat assessments as part of Warddeken's long-term biodiversity monitoring surveys. © Kane Chenoweth

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Alexandria Namarnyilk and Tinnasha Nabalwad walk between monitoring sites during camera deployments on a biodiversity monitoring survey. © Kane Chenoweth

**OUR VISION IS TO HAVE
OUR HEALTHY PEOPLE
LIVING AND WORKING ON
OUR HEALTHY COUNTRY
IN THE KUWARDDEWARDDE
(THE STONE COUNTRY OF
WEST ARNHEM LAND).**

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

Students from Mamardawerre Nawarddeken Academy again joined forces with Warddeken rangers for the annual Stone Country bushwalk, which takes young people to areas of Country they've never before experienced, due to their inaccessibility by vehicle. Bushwalkers camp at locations near to fresh water, which provides children and adults alike with plenty of opportunity for swimming and fishing, including practicing with traditional spears. Photo by Cody Johnson



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Early dry season burning is the cornerstone of Warddeken's annual work program. An important component of this work is teaching children how to skilfully wield fire as a tool to look after Country. Photo by Cody Johnson

WARDDEKEN OVER THE YEARS

Vision of Professors

2002

Kabulwarnamyo community established by Mok Elders, families and dedicated group of Balanda friends

2004

Manwurrk rangers formed (under NLC) operating from Kabulwarnamyo 2004-2007

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

Indigenous Protected Area (IPA) declared, incorporating 32 clan estates of the west Arnhem plateau

2008

First large scale aerial feral animal cull

2007

Warddeken Land Management Limited registered as a not-for-profit company. Manwurrk rangers transition to Warddeken rangers.

2015

Nawarddeken Academy community school established at Kabulwarnamyo

2017

Established Mayh (Species) Recovery Monitoring Project

2017

Established Daluk (Women's) Ranger program

2018

Nawarddeken Academy gains Independent School Registration for Kabulwarnamyo school

2018

Wakadjaka Monitoring and Evaluation Subcommittee established

2018

Banksia Indigenous Award for achievement against UN Sustainability Goals

2021

Nawarddeken Academy Manmoyi and Mamardawerre schools gain Independent School Registration

2020

Board member Fred Hunter receives NT Ranger of the Year Award

2019

Established Kunwarddebim Rock Art Program

2019

Ten-year anniversary of the Warddeken IPA

2018

Mamardawerre ranger base established

2021

Territory NRM Collaboration Award in partnership with Kanrkad Kanjdji Trust and Mimal Land Management

2022

Territory NRM Award for Indigenous Natural Resource Management for the Mayh (Species) Recovery Program

2022

Board member and senior ranger Terrah Guymala receives NT Ranger of the Year Award

2023

Bidwern Butj Uni, a partnership between Mimal and Warddeken funded by KKT, formally commences operations

Onwards

THE WARDDEKEN INDIGENOUS PROTECTED AREA (IPA)



THE WARDDEKEN STORY

Warddeken was established in 2007 by Traditional Aboriginal Landowners representing 32 clans of the Kuwarddewardde – the Stone Country of the west Arnhem Plateau. Spearheaded by esteemed leaders Professor Bardayal Lofty Nadjamerrek AO and Professor Mary Kolkiwarra, their vision of creating the region’s first ranger program marked a return to Bardayal’s Mok Clan Estate at Kabulwarnamyo. This was the beginning of what is now a land management movement across the Kuwarddewardde, driven by a new generation of Bininj (Indigenous people) with a continued commitment to care for their Country.

Nawarddeken clan groups have inhabited the Kuwarddewardde for millennia, managing the landscape using a blend of religious and practical methods. During wet seasons, family groups relocated to higher ground and the shelter of rocky escarpments. Here they created ochre paintings chronicling life in the Kuwarddewardde, spanning tens of thousands of years. As monsoonal rains subsided, families moved down into the open woodlands where they would travel their Country throughout the dry seasons. Walking and camping along Bininj manbolh (customary walking tracks) that wove through the Kuwarddewardde and beyond, people lit small, cool fires during the early dry season (yekke) and mid dry season (wurrkeng). Djungkay, or ceremonial managers by matrilineal inheritance, conducted and oversaw ceremonies aimed at encouraging the regeneration of food plants and the proliferation of animal species. Senior Landowners frequently visited Djang (Sacred Sites), and other culturally significant places to honour ancestors and creator spirits and perform essential rituals.

Today, the Kuwarddewardde remains the home of Nawarddeken and proudly hosts three Warddeken ranger bases. However, for many years, the Stone Country was largely uninhabited. The arrival of Balanda (Europeans) prompted many Nawarddeken to leave, drawn by Christian and government missions, opportunities in the mining and buffalo industries, and the appeal of larger settlements like Gunbalanya and Maningrida. By the late 1960s, the Kuwarddewardde was largely depopulated. Nawarddeken Elders viewed the Country as ‘orphaned’ and were deeply concerned about its future. Over the following 30 years, Warddeken Professors witnessed the devastation caused by large wildfires and the increasing presence of feral animals, which significantly damaged both the physical and cultural landscape.

Deep concern over the state of their homelands inspired a strong desire among Nawarddeken to return to the Kuwarddewardde, revitalising their responsibility to care for Country and pass this knowledge on to younger generations. In the early 1970s, Bardayal Nadjamerrek AO, Warddeken’s visionary leader, began the long journey of bringing his people back to their ancestral lands. Over the next three decades, Bardayal worked tirelessly to reconnect people with Country. In 2002, he finally returned to his cherished

homeland on Mankungdjang Clan Estate (Wild Honey Dreaming) at Kabulwarnamyo. There, he collaborated with other leaders, including his wife Mary Kolkiwarra, Jack Djandjomerr, Josie Maralngurra, Jimmy Kalariya, and Ruby Bilidja, as well as dedicated Balanda friends, to establish the Manwurrk Ranger program, the precursor to Warddeken Land Management.

The creation of the Manwurrk Rangers allowed Landowners to earn a livelihood on Country for the first time. Warddeken has grown and evolved over the years since, now providing permanent employment for Nawarddeken living in Kabulwarnamyo, Manmoyi, Marlkawo, and Mamardawerre.

The Manwurrk Rangers also pioneered several innovative fire management initiatives, including the world’s first savanna burning carbon project, the West Arnhem Land Fire Abatement Project (WALFA). In 2007, following extensive consultation between Landowners and the Northern Land Council (NLC), Warddeken Land Management Limited was formally registered as a not-for-profit public company limited by guarantee, evolving the Manwurrk Rangers into what is now Warddeken.

One of Warddeken’s proudest achievements was, in 2015, partnering with Karrkad Kanjdji Trust (KKT) to realise Landowners’ long-time dream of bringing full-time education to the Warddeken IPA. In creating Warddeken, one of the most important outcomes for Elders and Professors was that children would be able to live and learn on Country. Though the Warddeken ranger program works extensively with children and young people, by the 2010s it had become clear that access to formal education was a serious issue for many rangers with young families. Never afraid to shy away from a challenge, in July 2015 the first full-time school in the Warddeken IPA was opened under a tarp at Kabulwarnamyo. In the journey since, Warddeken established, hosted, and then supported a move to independence for a new company focused on delivering education in the IPA – Nawarddeken Academy Limited. The exemplary work of Nawarddeken Academy has led to three registered independent Nawarddeken Academy schools in the Warddeken IPA, located in the same communities as ranger bases. Bringing these crucial pieces of social infrastructure to children across the IPA is a life-changing achievement.



Above: The rugged, inaccessible terrain of the Warddeken IPA renders helicopters a necessity for many work programs. © Kane Chenoweth



Below: History and present day – the shoulder badge is the original Manwurrk Rangers logo, designed by Professor Jimmy Kalareya; the chest badge is the new Warddeken logo, the hand stencil of our founder Professor Bardayal Lofty Nadjamerrek. © Rowand Taylor

OUR PROFESSORS

With deep respect and gratitude, we acknowledge the most senior Nawarddeken, our revered Professors. This annual report is dedicated to them. Their wisdom, spanning countless generations, charted the course we navigate today, and their vision guides us into the future.

Warddeken also recognises the status of our present cultural leaders, who, over the years, have dedicated themselves to the growth and development of Warddeken.



**Bardayal Lofty
Nadjamerrek AO**
1926-2009



Jimmy Kalariya Namarnyilk
1934-2012



Peter Nabarlambarl Billis
1935-2012



Jack Djangjomerr
1945-2014



Ruby Bilidja
1930-2014



**Mary Kolkiwarra
Nadjamerrek**



Josie Maralngurra



Lillian Guymala



**Berribob
Dangbungala Watson**



Wurdib Nabalwad



Don Nakadili Namundja



Lewis Naborlhborlh



Elizabeth Bangarr



Leanne Guymala



Elizabeth Nabarlambarl
1969-2023



Molly Nayilibidj
1950-2021



Leonie Guymala
1938-2014



Timothy Nadjowh AO
1923-2017



Jacob Nayinggul
1943-2012



Djawida Nadjongorle
1933-2012



Mary Naborlhborlh
1930-2012



Nigel Gellar
1952-2022



**Margaret Nalorlman
Nabalwad**



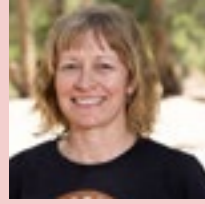
Deborah Nabarlambarl



Dean Yibarbuk

OUR PEOPLE

Staff



Alys Stevens
CEO (Interim, July 2023 – April 2024)



Adam Nitschke
CEO (Incoming, May – June 2024)



Dean Yibarbuk
Fire Ecologist,
Mentor & Professor



Natalie Chester
Operations Manager



Jenny Woods
Financial Officer



Terrah Guymala
Senior Ranger &
Cultural Projects



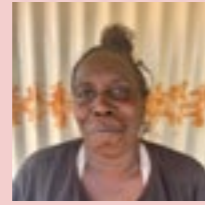
Jenny Nadjamerrek
Senior Ranger



Freddy Nadjamerrek
Senior Ranger



Arijay Nabarlambarl
Senior Ranger



Suzannah Nabalwad
Senior Ranger



Manoah Nawilil
Senior Ranger



Dr Cara Penton
Ecological Monitoring
Manager



Erica Smith
Ecological
Monitoring Officer



Dr Claudia Cialone
Rock Art Project
Manager



Chester Clarke
Rock Art Project
Officer



Jayden Wurrkidj
Bininj Rock Art
Officer



Tinesha Nabalwad
Daluk Rock Art
Officer



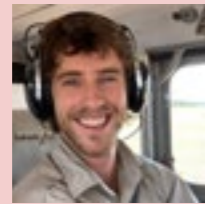
Brad Copeland
Kabalwarnamyo
Bininj Ranger
Coordinator



Lorraine Kabbindi White
Kabalwarnamyo Daluk
Ranger Coordinator
(Incoming)



Celina Ernst
Kabalwarnamyo
Daluk Ranger
Coordinator
(Outgoing)



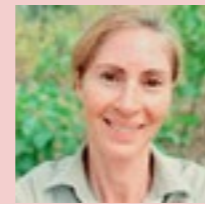
Kyle Glover
Mamardawerre Bininj
Ranger Coordinator



Paris O'Rourke
Mamardawerre Daluk
Ranger Coordinator



Chris Daniell
Manmoyi Bininj
Ranger Coordinator



Pam Daniell
Manmoyi Daluk
Ranger Coordinator



Lauren Hicks
Operations Support
Officer

Senior Cultural Advisors



Lillian Guymala



Deborah Nabarlambarl



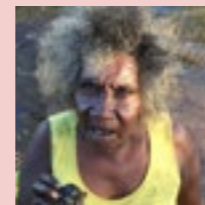
Wurdib Nabalwad



Berribob Dangbungala Watson



Mary Kolkiwarra Nadjamerrek



Josie Maralngurra

Senior Cultural Advisors



Leanne Guymala



Margaret Nalorlman Nabalwad



Christopher Ngaboy



Don Nakadili Namundja



Lewis Naborlhborlh



Elizabeth Bangarr

Thanks to our dedicated team of Indigenous rangers

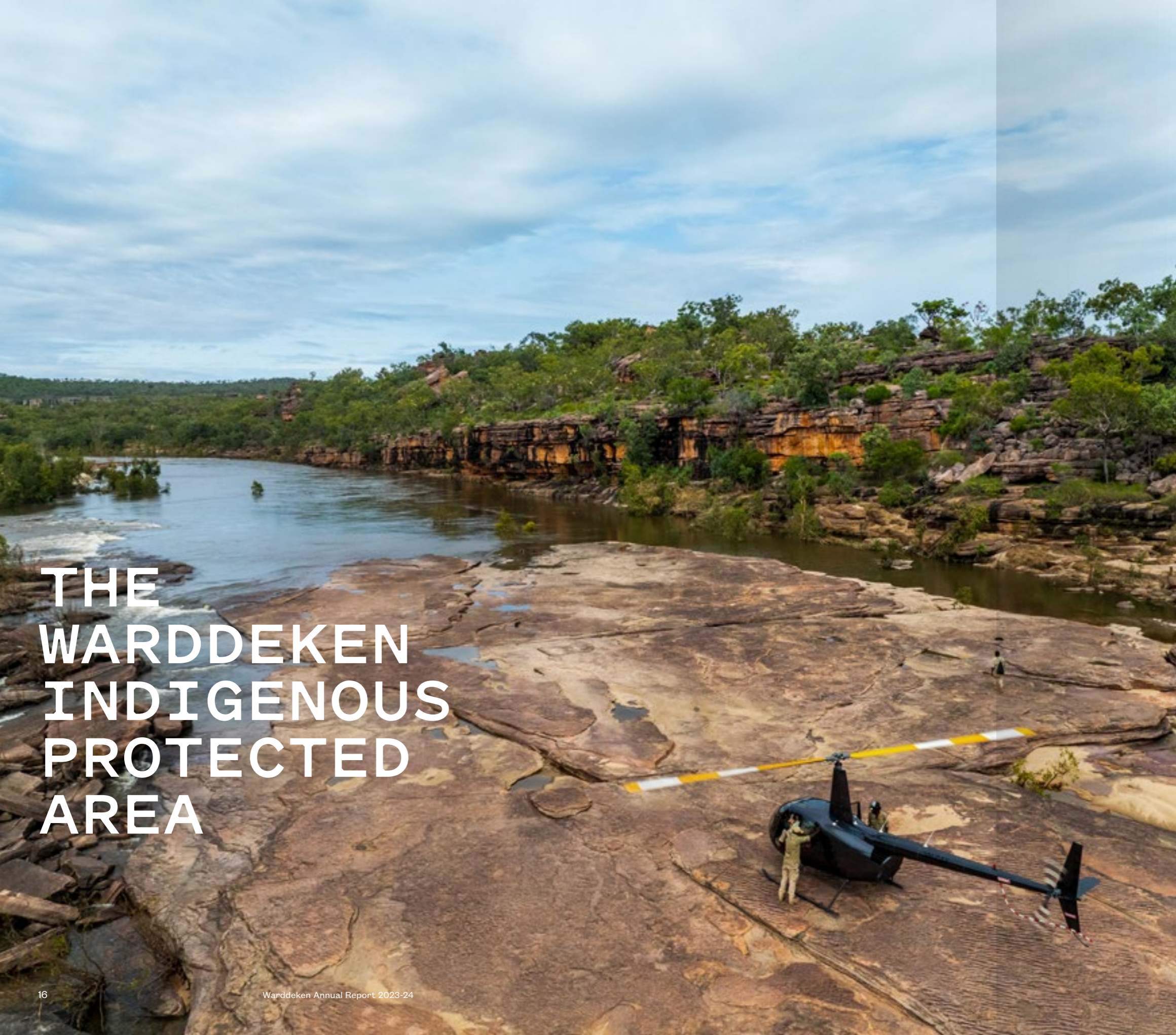
Daluk (female) = 119
Bininj (male) = 140
Total = 259

Indigenous Bininj Staff

Adrian Garnarradj, Alfred Nalorlman, Alton Marami, Amroh Djandjomerr, Anderson Nalorlman, Andrew Maralngurra, Andy Wood, Angus Pilakui, Anthony Billis Nabarlambarl, Arijay Nabarlambarl, Arthur Adrian Gamarrawu, Ashley Nayilibidj, Ashton Narorrnga, Azel Naborlhborlh, Berribob Watson, Cain Naydwana, Canon

Indigenous Daluk Staff

Ada Nabalwad, Adeline Guymala, Alexandria Namarnyilk, Alexia Gumurdul, Annabelle Gungagunga, Anne Marie Ahwon, Annie Cameron, Asheena Guymala, Ashelina Guymala, Aspellita Guymala, Beatrice Namundja, Benita Alangale, Besilina Wood, Bianca Balmana, Camellia Lindjirwanga, Cammie Wood, Carmen Garnarradj, Carol Dennis, Carol Nayilibidj, Catherine Ralph, Cathleena Wurrkidj, Chantel Nabalwad, Christine Alangale, Colleen Nagurrurrba, Connie Nayinggul, Daisy Nabegeyo, Damazine Alangale, Deborah Nabarlambarl, Delane Badari, Delvina Guymala, Diane Nalorlman, Donna Nadjamerrek, Dorita Djorlom, Drusilla Nadjamerrek, Edna Midjarda, Eliza Nawirridj, Ethel Nayinggul, Evelyn Narorrnga, Faith Nadjamerrek, Gabriella Maralngurra, Glenda Gurruwiwi, Hagar Nadjamerrek, Jalisa Koimala, Janice Nalorlman, Janine Nabegeyo, Jennifer Hunter, Jenny Nadjamerrek, Jeraiah Guymala, Jessie Alderson, Joelene (Lisa) Miller, Josephine Brown, Josephine Nadjorngorle, Josie Balmana, Joylene Cameron, Judith Burrenjuck, June Nadjamerrek, Justina Namarnyilk, Kara Wurrkidj, Kayla Nagurrurrba, Kaywana Gamarrwu Guymala, Kyrin Bulliwana, Lana Nabalwad, Leanne Marlawud, Leanne Nabarlambarl Guymala, Lillian Jnr Guymala, Lilly Oliphant, Linda Garnarradj, Lois Nadjamerrek, Lorina Maralngurra, Lorna Nabalwad, Lynne Nadjowh, Mandy Muir, Margaret Nalorlman Nabalwad, Marlene Cameron, Mary Kolkiwarra Nadjamerrek, Mavis Jumbiri, Michelle Bangarr, Milly Naborlhborlh, Naomi Nadjamerrek, Natasha Yibarbuk, Patricia Nadumula, Penelope Yibarbuk, Peta Anne Nalorlman, Princess Nalorlman, Priscilla Badari, Recain Nabarlambarl, Rhonda Nadjamerrek, Rosemary Nabalwad, Ruth Kelly, Ruth Nabarlambarl, Sara Cooper-Billess, Sarah Billess, Selina Nadjowh, Seraphina Watson, Serina Namarnyilk, Serita Djungkidj, Sheerah Namundja, Shemaiah Guymala, Shenaih Gumurdul, Shirley Djandjomerr, Shona Carter, Sophie Naborlhborlh, Suzannah Nabalwad, Tahnee Nabalwad, Tamika Alangale, Taran Nabarlambarl Nawilil, Theona Namarnyilk, Toni Whitehurst, Vietta Bangarr, Wynita Naborlhborlh, Yvette Namundja, Zara Anne Nalorlman, Zora Mukumiri



THE WARDDEKEN INDIGENOUS PROTECTED AREA

The unwavering commitment of Dabborrabbolk (Old People) to see the Kuwarddewardde cared for by its rightful custodians in perpetuity led to the establishment of the Warddeken Indigenous Protected Area (IPA) on 24 September 2009. Covering 14,000 square kilometres of ancient stone and gorge Country, the Warddeken IPA is home to hundreds of endemic species, a variety of threatened flora and fauna, and one of the world's largest and oldest collections of rock art.

The Warddeken IPA encompasses the headwaters of several major rivers, including the Liverpool, Mann, East Alligator, South Alligator, Katherine, and Goomadeer, which sustain an intricate network of freshwater systems. The IPA's dominant rocky escarpments and open savanna woodlands host unique ecosystems such as fragile spring-fed perched wetlands, the federally protected Arnhem Plateau Sandstone Shrubland Complex, and ancient Anbinik rainforests. Threatened species living in the IPA include djabbo (northern quoll), mulbbu (Arnhem Land rock-rat), alyurr (Leichhardt's grasshopper), yirlinkirrkirr (white-throated grasswren), and nawaran (Oenpelli python).

The Warddeken IPA forms part of a significant conservation corridor stretching from Kakadu National Park in the west to the Djelk IPA in the northeast, and to the southeast, the proposed Mimal and Arafura Swamp (ASRAC) IPAs. This network of protected and proposed protected areas creates an unbroken conservation corridor from the coast to the escarpments and inland savannas, managed for the purpose of ecological and cultural preservation.

Four permanently inhabited homeland communities lie within the Warddeken IPA: Manmoyi, Kabulwarnamyo, Marlkawo, and Mamardawerre (just outside the northern boundary). Other homelands, such as Kudjekbinj, Kamarrkawarn, and Kumarrirrbang, are seasonally occupied. The resilient residents of these communities comprise the core of Warddeken's workforce.

Warddeken operates from three remote ranger bases: Kabulwarnamyo (established 2004) and Manmoyi (established 2012) in the koyek (eastern) ward of the IPA, and Mamardawerre (established 2018) in the kakbi (northern) ward. Maintaining multiple ranger bases is crucial for ensuring that management efforts are spread throughout the IPA and that the benefits of the ranger program are shared by Landowners from across the region.

The repopulation of the Kuwarddewardde, along with the establishment of Warddeken ranger bases and Nawarddeken Academy schools, has empowered Nawarddeken to take more active roles in managing and caring for their Country. As Warddeken's impact and reach continue to grow, the organisation remains deeply committed to supporting the return of Nawarddeken to their clan estates and ensuring the ongoing stewardship of the Kuwarddewardde for future generations.

In addition to supporting Landowners living on Country, Warddeken collaborates closely with diaspora Landowners residing outside the IPA, helping them reconnect with their clan estates through participation in work programs. These Landowners are spread across larger communities such as Jabiru, Gunbalanya, Maningrida, Katherine, Barunga, Beswick, Bulman, and Weemol.

Sometimes a lunch stop in the Warddeken IPA looks like this – if rangers are lucky, they may catch fresh barramundi to cook on a fire. © Kane Chenoweth

OUR AIMS

.....
Conserve Indigenous knowledge
.....

.....
Protect the environmental
values of the land
.....

.....
Participate in natural and cultural
resource management projects
.....

.....
Participate in 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
.....



Some rocky regions of the IPA are so high in elevation that they're free from dangerous saltwater crocodiles. Children from outstation communities make the most of this, swimming daily throughout the hottest parts of the year.
© Kane Chenoweth

BOARD OF DIRECTORS

Warddeken Land Management Limited proudly represents a membership of more than 470 Bininj Nawarddeken, each with connections to one or more of the 32 clan estates comprising the IPA. The governance of Warddeken embraces Indigenous leadership and self-determination, with the company overseen by an entirely Indigenous Board of Directors drawn from this membership base.

Three board members are elected triennially for each ward of the Warddeken IPA: kakbi (north), karrikad (west), walem (south) and koyek (east). This is accomplished through a democratic election process, with mobile polling conducted in the majority of communities where Nawarddeken reside.

At the end of 2020, elections were held and the following board members were voted in to represent members for the period 2022-2024 (calendar years).

KAKBI

- Michelle Bangarr
- Conrad Maralngurra
- Rosemary Nabalwad

Representing clan groups: Warddjak (Maburrinj), Ngalngbali (Kudjekbinj), Yurlhmanj (Djalbangurrk), Madjawarr (Kunukdi), Marrirn (Kumarrirrbang), Wurrik (Mandedjkadjang), Mayirrkulidj (Djurlka), Durimangkarr (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 Jumbirri
- Jolene Miller
- Dean Yibarbuk

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

KOYEK

- Terrah Guymala
- Sarah Billess
- Ray 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



Michelle Bangarr



Conrad Maralngurra



Rosemary Nabalwad



Jessie Alderson



Fred Hunter



Kenneth Mangiru

KARRIKAD



Mavis Jumbirri



Jolene Miller



Dean Yibarbuk

WALEM



Terrah Guymala



Sarah Billess



Ray Nadjamerrek

KOYEK

GOVERNANCE



Above: This is what a Warddeken board meeting looks like – a bark shade shelter in a dry creek bed, out on Country in the IPA.

Right: The rock art of the Warddeken IPA represents one of the broadest and most voluminous collections anywhere on earth. Warddeken is committed to supporting the rightful custodians of the art to conserve and document these places for posterity. © David Hancock

Membership of Warddeken is open to Landowners from the 32 clan groups comprising the Warddeken IPA. Connection to Country is recognised in four distinct ways, ensuring an appropriate cultural governance structure: father's Country (Daworro), mother's Country (Djungkay), maternal grandmother's Country (Kakkak), maternal great grandmother's Country (Doydoy).

Warddeken is governed by a board of twelve Indigenous directors, representing the company's 514 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 overseeing financial management.

The Warddeken board is supported by an independent governance advisor, who works closely with the chairperson and other members of the board to enhance understanding of Balanda governance.

During the 2023-24 financial year, the Warddeken Board convened at Kabulwarnamyo (September 2023), Maningrida (November 2023), Kabulwarnamyo (April 2024) and Manmoyi (June 2024). All meetings achieved quorum.

Warddeken's 2023 AGM was held at Injalak Arts in Gunbalanya on Friday the 24th of November.



REPORT FROM THE CHAIRPERSON



Warddeken have achieved so much over the past year, despite facing some challenges along the way.

Firstly, I would like to say thank you to my yabok (sister) bulanjdjan, who stepped in at a time when the company required leadership from someone trusted and experienced. In her ten months as Interim CEO, Bulanjdjan's long history of working alongside Nawarddeken in the Kuwarddewardde, and her deep knowledge of Warddeken as an organisation, were the right combination of skills our company needed.

In May this year, we were very pleased to welcome Adam Nitschke as our new CEO. In his short time with Warddeken, Adam's shown an understanding of the Warddeken vision, and has spent as much time as possible on Country in the IPA getting to know our members and rangers. I look forward to working closely with Adam as we continue growing and strengthening Warddeken.

One of the biggest projects I've been involved in this year is the Bidwern Butj Uni partnership between Warddeken, Mimal and Karrkad Kanjdji Trust. It has been a long-time personal dream of mine to establish a higher learning institute for rangers and Indigenous learners in remote west and central Arnhem Land, so seeing these early conversations turn into actions has been very exciting. I am reminded of our journey to create the first Nawarddeken Academy school in the Warddeken IPA, back in 2015. The Bidwern Butj Uni is the next step in providing access to education in the Warddeken IPA.

Another highlight of my year was being invited by the International Wildfire Association to give a keynote address at their 7th Fire Behaviour and Fuels Conference. My speech was entitled 'For Bininj, fire is everything' and in it, I shared my personal experience as a fire practitioner, alongside stories about the success of Indigenous fire management in Arnhem Land.

Finally, I want to thank my fellow directors for the time and effort they have put into Warddeken over the past year. It remains clear that this board deeply value the vision and ongoing impact of our company, and are proud to represent the Warddeken membership. It is a privilege to work with this group of Bininj as we continue to make our company strong.

A handwritten signature in black ink, appearing to read 'Yibarbuk'.

Dean Yibarbuk
Chairperson



The iconic landscape of the Warddeken IPA – rocky escarpments, a gorge of ancient Anbinik trees, and stretches of open savanna woodlands.
© Kane Chenoweth

REPORT FROM THE CEOS

The 2023-2024 financial year represents an important milestone for Warddeken Land Management, marking 17 years of operation since its creation in 2007, and the start of a new chapter in our journey towards achieving our vision.

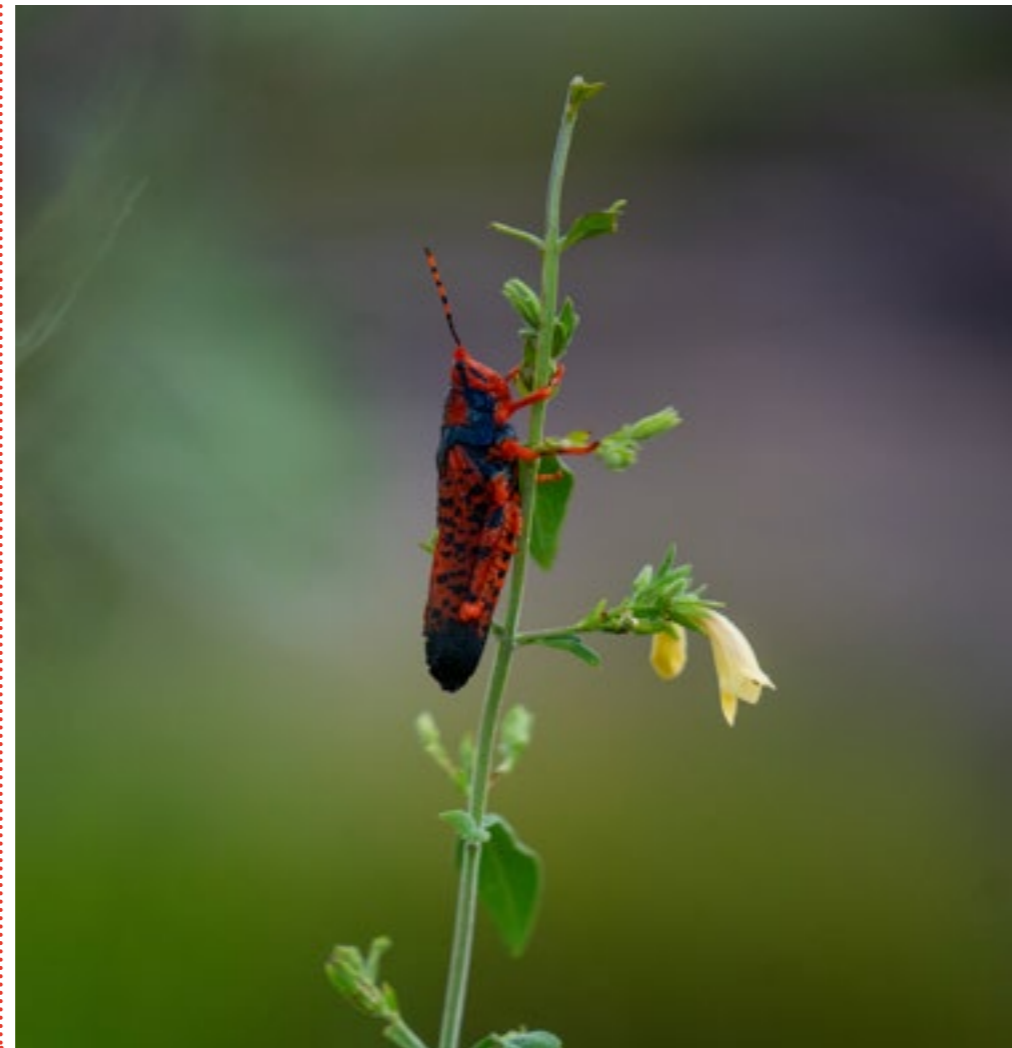
We write this together – Alys Stevens as outgoing Interim CEO and Adam Nitschke as incoming CEO – recognising a year of ongoing achievement throughout organisational change.

Warddeken’s resilience was demonstrated during the latter half of 2023, with the entire team rallying to face a challenging wildfire season amidst significant staff turnover. A tremendous effort involving strategic guidance from former staff and the hard work of on ground teams including over 50 rangers, coordinators, ALFA fire officers and neighbouring ranger groups saw 23 wildfires successfully tackled, resulting in only 2.3 per cent of the Warddeken IPA being impacted by late season fire. This outstanding result, whilst undergoing internal adjustments, speaks to the robustness of the manwurrk program, the determination of the Warddeken team here in the Kuwarddewardde, and the strength of our deeply valued partnerships.

The wet season welcomed the commencement of many new staff – the Operations Manager, four Ranger Coordinators (Manmoyi and Kabulwarnamyo bases) and, in May, a new CEO. The stabilised and fully appointed team brings a mixture of local knowledge and new skills and experience to take Warddeken forward as it continues to grow and evolve. This enabled a strong dry season program of track reopening to remote outstation communities, supporting Anbinik protection works, and a program of customary cool season on ground and aerial prescribed burning. Our flagship Mayh (Native Species) and Bim (Rock Art) programs continued to go from strength to strength as beacons of quality Bininj-owned ecological and cultural heritage programs.

Throughout the year, the Warddeken Board of Directors have been steadfast in their commitment to the Warddeken vision, and we would like to thank them for their insight, clear direction and continuing integrity.

Bininj view alyurr (Leichhardt’s grasshopper) as children of Namarrkon, the lightning creation being. The vivid colours of alyurr are a sight to behold in the wet season, when they are most commonly sighted. © Kane Chenoweth



A note from Alys

I have been lucky enough to be getting around Arnhem Land and the Warddeken IPA since 2010, when I started out as a field ecologist and quickly became enthralled by the vision of Warddeken. Standing in as Interim CEO was an opportunity to bring those years of institutional knowledge and relationships to bear.

The board and I were very pleased to welcome Adam as our new CEO, recognising the organisational experience, strategic thinking and fair-mindedness he brings to the company. I have returned to my former role and will continue to work closely with Adam and the board to support a smooth leadership transition.

I must give a heartfelt thank you to our incredible board of directors, all Warddeken staff past and present, our neighbouring ranger groups and our partners both within and outside of government for your commitment to Warddeken and to the vision of the Indigenous Ranger movement across Australia. We’ve achieved a lot, but there is still so much more to do. Onwards!

Alys Stevens
CEO (Outgoing Interim)



A note from Adam

As incoming CEO, I would like to acknowledge the profound professional and personal contribution that Alys Stevens has made to Warddeken in providing skilled leadership in the CEO role over a period of ten months.

I commenced in the role in May 2024 to find the organisation strong, the culture positive and I would like to express my deep gratitude for the warm and generous welcome that Bininj and Balanda staff alike, have provided me.

It was a great privilege to participate in the 2024 bushwalk, when 70 Bininj community members of all ages, along with Balanda staff from Warddeken and Nawarddeken Academy, walked for 12 days from Kudjumarndi to Makkalarl, hunting, fishing, burning and sharing cultural practices that have been alive for millennia.

Warddeken has grown. With a membership of 514, a casual workforce of 259 rangers in this financial year, and a management team and support staff of 18, Warddeken today is very different from the small and agile company first conceived in 2007.

During 2023-24 we oversaw an operational budget of \$8.5 million, which was deployed to plan and implement a diverse program of land and cultural management activities from three remote ranger outstations in an environment that is at the same time both stunningly beautiful, and physically and logistically taxing.

Ahead, there is a need to work with the Warddeken board recognising the scale of operations, to protect our financial position and develop a contemporary workforce and policy framework that ensures that Warddeken’s obligations are met and our interests protected.

I deeply value the collaboration and support of our close partners, Nawarddeken Academy, Arnhem Land Fire Abatement (ALFA), Karrkad Kanjdji Trust (KKT) and Bidwern Butj Uni. Our collective expertise and shared goals mean that we can walk together in achieving Warddeken’s vision.

Adam Nitschke
CEO (Incoming)

THE YEAR IN NUMBERS

Indigenous Rangers employed

259

140 Bininj^(male)

119 Daluk^(female)

Warddeken Land Management Limited members

514

Square kilometres managed

14,000

Biodiversity surveys

140 motion sensor cameras deployed

23 acoustic recorders

18 native mammals detected

7 feral animals detected

34 native birds detected

10 native reptiles detected

3 new detections of priority species

Feral animals

1,304 feral animals removed

1,178 mixed feral animals culled aerially

127 mixed feral animals culled on ground

Wildfire suppression late dry season (Aug-Dec 2023)

23 fires controlled

53 rangers involved

Anbinik isolate forests

17 at-risk forests protected by on ground fire break

12 forests protected by targeted aerial burning

Rock art

50+ Landowners involved in program

19 site conservation trips

25 new sites surveyed

Major cultural events

1 large bushwalk 70 attendees

1 opening up Country camp

1 daluk and culture camp

2 rock art and culture camps

2 biodiversity and culture camps

200+ participants across all events

Prescribed burning early dry season (April-July 2024)

9767 km aerial burning

1818 km on ground burning

127 Landowners consulted

MANWURRK

FIRE MANAGEMENT



The results of a strategic, cool burn along the banks of the East Alligator River.

127 Landowners consulted

Aerial burning

114 helicopter hours
9767 km aerial burning
30 Landowners involved

Ground burning

1818 km ground burning
43 Landowners involved



Nawarddeken have always used fire to manage the Stone Country of west Arnhem Land, and customary burning practices dating back thousands of years are still used today by rangers and Landowners to care for the Warddeken IPA. Landscape-scale burning has always been conducted during yekke (early dry) and wurrkeng (mid dry) when fires were ignited strategically as Bininj traversed Country. These techniques shaped the cultural and ecological landscape of the Kuwarddewardde.

For Nawarddeken, fire is not an unpredictable weather event to be feared; rather, fire is a tool wielded skillfully to achieve a range of desired outcomes for Country.

Building upon the foundational knowledge laid out by Elders and Professors, Warddeken crafted a fire management program that blends traditional lore with contemporary science. This synergy enhances the ecological health of the Kuwarddewardde and positions Warddeken as a global leader in savanna burning and carbon abatement.

Ground burning remains a key feature of Warddeken's annual fire management program, a practice still deeply rooted in tradition. This is complemented by strategic aerial burning, which establishes a network of fine-scale and precisely targeted fire breaks across the IPA. The combination of traditional and contemporary fire management techniques is testament to Warddeken's commitment to respecting the dual toolboxes of ancestral wisdom and cutting-edge scientific knowledge.

For almost twenty years, Warddeken rangers have implemented a complementary blend of traditional and modern fire management techniques, in the process stabilising the fire regime of the Kuwarddewardde. Warddeken's fire program is comprehensive, involving prescribed burning in the early dry season and deploying wildfire suppression measures in the late dry season. Combined, these practices have proven instrumental in protecting the IPA's ecology, preserving rock art and cultural heritage sites, and contributing to the global abatement of greenhouse gases.

Beyond environmental and cultural outcomes, Warddeken's fire management program is also a source of economic sustainability. Represented by our partners at Arnhem Land Fire Abatement (ALFA) NT Limited, engagement in the carbon economy has established a vital income stream.



Left: Richard, a student from Kabulwarnamyo Nawarddeken Academy, lights fires using a 'bush drop torch'.

Above: The Warddeken crew in attendance at the 2024 ALFA preseason meeting – an important opportunity to discuss the year ahead with neighbouring ranger groups.

The WALFA Project

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 17 years since WALFA's inception, Warddeken and other project partners have built internal capacity to deliver broadscale fire management, also demonstrating the positive environmental, cultural, social and economic benefits that arise from good fire management practice. The success of WALFA has also seen carbon abatement exceed expectations, with over 6.2 million tonnes of greenhouse gases (also referred to as 6.2 million Australian Carbon Credit Units or ACCUs) abated to date.

Excess emissions avoidance credits are marketed through the Indigenous-owned, not-for-profit company ALFA (NT) Limited, of which Warddeken is a partner. Sales of ACCUs have led to substantial locally generated revenue being reinvested into the ranger groups who manage the WALFA Project.



Right: Dr Cara Penton and Terrah Guymala discuss the implementation of specialised burning to protect pre-identified, long-unburnt areas of Country that are refuges for threatened flora and fauna. © Kane Chenoweth

Top right: Tahnee Nabalwad, djungkay for Mok clan, directs APB on her mother's Country for the third consecutive year.

Bottom right: Rangers conduct asset protection burning at Kabulwarnamyo ranger base and community.





2024 Early Dry Season Burning

Each year, senior Warddeken personnel engage in extensive consultations with IPA Landowners to obtain consent and gather feedback on implementing the early dry season burning program. The Warddeken 2024 fire plan was developed with input from a total of 127 Landowners.

The maps used by rangers and Landowners for consultation and planning contained the following information to assist decision-making and on ground application of fire management within the Warddeken IPA;

- Fire history including heterogeneity, time of year, wand time since last burnt.
- *Allosyncarpia ternata* (Anbinik forests) across the Arnhem Plateau.
- Priority woodland habitats identified as known or having a high chance of being critical habitats for endangered mammals.
- Known populations of the vulnerable (EPBC Act) white-throated grasswren and associated sandstone shrubland patches.

This year, Warddeken engaged long-time Warddeken collaborator Jake Weigl as a dedicated fire support officer, to continue and enhance the delivery of a strategic, cohesive, comprehensive and Bininj-led early dry season fire program, while supporting new ranger coordinators and the operations manager during the busiest time in the work calendar.

Rangers from all bases carried out ground burning from 4WD vehicles or on foot, using drip torches or matches to ignite fires. In 2024, on ground burning operations increased significantly from the previous year, covering a total of 1818 kilometres of tracks and roads within the IPA, including the 90 kilometres burned on foot during the bushwalk.

Aerial prescribed burning (APB) is a modern fire management method, however, time has proven that rangers and Landowners are readily able to transfer their knowledge of Country and fire dynamics to an aerial approach. Advances in APB technology allow for adjustments to the delivery rate of incendiaries, meaning APB can be customised to deliver very specific burning results, taking into account weather and fuel conditions for different environments in the landscape. Warddeken has a team of experienced Indigenous bombardiers who support the delivery of the APB program.

Warddeken's approach to aerial burning was determined by Elders and Professors in the development of the WALFA project – they were clear that the customary decision-making power of Landowners over burning Country must be maintained at all times, despite the contemporary mode of delivery. Warddeken, as a pioneer of aerial burning in an Indigenous context, is committed to ensuring Warddeken's fire program remains a leader not only in conservation and carbon abatement outcomes but also in delivering an authentically Bininj-led program. Demonstrating our ongoing commitment to the original vision for the fire project, Warddeken's APB program puts Bininj agency at the fore by utilising the following strategies:

- Encouraging conversations between Landowners about burning decisions and fire behaviour in each clan estate.

- Giving Landowners the freedom to make decisions about burning based on real time conditions of Country – vegetation curing rates, fire scars, wind conditions etc.
- Supporting younger generations of rangers and Landowners learn about their Country based on historical burning work with senior members of their clan group.

This year, APB took place between April and June 2024 with a total of 30 Landowners and Djungkay involved, with six participating twice. Just under 10,000 kilometres of helicopter flight lines were recorded from flights out of Mamardawerre, Manmoyi, Kabulwarnamyo, Jabiru and Gunbalanya. As part of standard operations, all flight tracks were recorded using a handheld GPS and tablets, with this information sent to ALFA and the Darwin Centre for Bushfire Research (DCBR) as part of Warddeken's ongoing participation in the WALFA project.

A priority of the fire program this year was to open, repair and maintain the IPA's entire network of roads and tracks, a huge job that was completed through a collaborative effort across all ranger bases. The fire support officer and small teams of rangers also undertook a series of on Country camps focused on road repair and on ground burning that saw them travel to all four wards of the IPA. Feedback from rangers involved in the camps was overwhelmingly positive – they loved seeing new places in the IPA and camping out on Country for extended periods.

Warddeken staff continued to enthusiastically attend the ALFA fire meetings that bring together rangers from across Arnhem Land, with Warddeken representatives attending the ALFA post-season meeting in December 2023, and thirteen representatives attending the ALFA pre-season meeting held at Bawurrbarrnda (Emu Springs) in April 2024.

Senior ranger Stuart Guymala has a deep knowledge of his father's Bordooh custodial estate, his mother's Djordi estate, and his grandmother's Madjajalum estate. For twelve years now he's been involved in fire management activities across these estates including aerial burning (as seen here), on ground burning, bushwalks, rock art conservation, learning on Country programs with students, and kangaroo fire drives.



ANBINIK

ALLOSYNCARPIA RAINFORESTS

Anbinik trees and forests provided much welcome shade for walkers on the 2024 Stone Country bushwalk, much as they have done for generations past.

Anbinik forests, characterised by the majestic *Allosyncarpia ternata* tree, are unique and endemic to the west Arnhem plateau. Once the dominant ecosystem of the Kuwarddewardde, these large, broad-canopied, shady trees – primeval ancestors of today’s eucalypts – hold a special place in the hearts of Bininj. Considered vital for both their contemporary ecological status and the cultural significance they held for Old People, Anbinik forests were actively managed through fire by generations past.

However, the slow-growing and fire-sensitive nature of Anbinik left them vulnerable to the wildfires that took hold with the depopulation of the Kuwarddewardde. Entire stands of these ancient forests were destroyed, leaving a lasting impact on the landscape. Today, Anbinik primarily exists in the deep gorges and rugged escarpments of the plateau, where they find protection from fire. In the savanna woodlands, small isolated forests persist, relying on rangers’ active and ongoing management and protection from wildfire.

The traditional practice of Anbinik management, has been reinstated by Warddeken to ensure the survival of these precious patches. Within the IPA there are identified ‘at-risk’ priority Anbinik forests that receive dedicated care through the Anbinik Management Program. This program

involves maintaining mineral earth breaks that have been installed by rangers over the past decade. Fire breaks surround entire stands of forest, with rangers able to safely undertake cool backburning from these breaks. In addition, rangers conduct targeted aerial prescribed burning in the vicinity of the forests, creating strategic early burned breaks to offer protection from late season wildfires. Through these culturally rooted practices, Warddeken is not only preserving the ecological integrity of the Anbinik forests but also upholding their profound cultural significance.

The annual Anbinik protection program was carried out over April and May 2024, with 17 at-risk patches protected. Rangers and coordinators came together to camp at seasonal bases at Makkalarl and Kunbambuk, working for weeks at a time to complete the breaks and burning. At Kunbambuk, one firebreak was moved significantly to protect young Anbinik trees that have started growing and to join together two patches, which will allow the forests to grow together over time.

Safeguarding the unique Anbinik forests of the Kuwarddewardde is an ongoing commitment, and our Anbinik protection program ensures the enduring protection of these culturally significant ecosystems.

Rangers perform back burning from fire breaks installed around entire stands of at-risk Anbinik isolate forests. This protective burning protects Anbinik from wildfire damage in the late dry season.

Above right: A sheltered Anbinik forest growing within a gorge in the north of the IPA. These forests are largely protected by the terrain, however strategic aerial burning operations provide additional protection. Photo © Kane Chenoweth



KUNWARDDEBIM

ROCK ART

The rock art team with young custodians Jesse Hunter and Catherine Ralph during a survey and conservation camp on Bolmo Dordokiyu custodial estate. The team had just documented a new rock art gallery on the lower East Alligator River. © David Hancock



Painted in ochre on the walls and ceilings of shelters across the rocky expanse of the Warddeken IPA are the stories of Bininj Nawarddeken, told across thousands of generations. This artistic and spiritual legacy represents one of the oldest and most significant collections of cultural heritage anywhere in the world, and the Kunwarddebim Rock Art Project has steadily been empowering and resourcing Bininj to design and deliver cultural heritage works based on their priorities to protect bim.

Opportunistic rock art surveys and site conservation have been ongoing since the days of the Manwurrk rangers; however, Landowners were clear in their desire to do far more to document and care for these places. 2019 was a turning point in Warddeken's rock art operations, with the Kunwarddebim Project formally commencing after a two-year pilot phase.

Through this project, Warddeken has set an ambitious goal of working with the relevant 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 each year more visually stunning, archaeologically rich and culturally significant galleries are rediscovered, with the ongoing goal of engaging Bininj and reconnecting people and Country.

What sets the Kunwarddebim Project apart in the field of heritage conservation is an unwavering commitment to deliver a program centred on honouring Bininj connections to rock art, and a belief that Bininj are the rightful people to make decisions about the way to document and care for these sites.

The rock art manager and project officer work alongside rangers and Landowners using a customised methodology of surveying and mapping kunwarddebim and directing a rigorous program of site conservation and protection.

Overall numbers

20 clan estates surveyed

308 total sites surveyed

2023-24 numbers

50+ rangers and Landowners involved

1 presentation at a National conference

2 Indigenous Officers employed part-time

2 survey camps working across four clan estates

19 site conservation visits



Right: Rock art project officers Jayden Wurrngkidj and Tinnesha Nabalwad lead a classroom session with Conrad Maralingurra, teaching Nawarddeken Academy students about different damages and threats to rock art.

Far right: Birribim (native beeswax art) in Bolmo Dordokiyu clan estate. © David Hancock



Rock art protection and story telling – supporting people to return to Country

Ngalngbali

Custodial estate

The Bim team, rangers and Ngalngbali Landowners invited supporters from the JT Reid Charitable Trust to visit the Naworo spirit that was recently repainted. The trip was an opportunity to discuss the history of the Bim project, the rock art surveys and conservation actions undertaken, and ideas for the future of the project. Warddeken director and cultural leader Conrad Maralngurra told the story of Naworo, the three-toed giant who placed himself on the rock wall at this site, shared the process of making stone spearheads – some of which are present at the site, and described how and where Old People collected the ochre used for painting.

Warridjngu

Custodial estate

Report by Indigenous Bim Officers Tinesha Nabalwad and Lesley Phillips

We have just finished a special week of bim surveys with Warridjngu Landowners and Djungkay Terrence Fredricks, Preston Lee and Darryl Miller, who travelled from Barunga to the Warddeken IPA. We choppered into the remote area and were lucky that we chose a campsite close to where we found the first rock art site. On the first day of arriving, we found a rare beeswax figure (birrdibim)! This set the tone for the camp – Warridjngu Country is rich with rock art, and we recorded as much as we could.

We started the survey by flying upstream, and the first place we landed, we spotted a bim site within minutes! After documenting this, we spotted another site high on the escarpment and the Bim crew managed to climb up high and record it up close. A few metres along from here is where we found the largest rock art site of the camp, and the Landowners, Bim crew and the helicopter pilot who came along on the adventure were very happy and excited. We made notes and recorded the site on a tablet, and the Landowners said they would love to come back and work on the site, cleaning and maintaining it in the future.

We continued the camp by searching downstream. We started walking onto the left side of the river, where we found a site that was full of bim with a large number of paintings of huge snakes. We crossed the river and went along the gorge, first, we found a large painting of three kangaroos then continued to follow the gorge and found even more sites! We also explored in from the river, where we found additional sites, including one we believe to be a sacred bim for Bininj (men) only.

The camp also allowed the Warridjngu Landowners to do more fishing and relaxing on their Country.



Left: The rock art team and Landowners surveying areas of Warridjngu clan estate.

Above right: Nawarddeken Landowners, rangers and rock art staff in Ngalngbali clan estate on a rock art trip with KKT supporters.

Bolmo Dordokiyu

Custodial estate

The Bim team travelled to Bolmo Dordokiyu clan estate with Landowner Catherine Ralph, to assess water damage at a site featuring an iconic post-contact painting of the explorer Ludwig Leichhardt astride his horse. The conservation assessment was deliberately scheduled for the wet season when the team could witness the flow of damaging water over rock surfaces. The figure of Leichhardt has been disappearing over the last decade, as attested by historical photos.

Warddeken and Bolmo Dordokiyu Landowners are now in the process of strategising key surface conservation and land maintenance operations to minimise the risks on this site, so the visual representations and their stories endure. The Leichhardt site will also remain under close seasonal monitoring.

Below left: Jayden Wurrngkidj explores a cavern in Bolmo Dordokiyu Country on survey for potential rock art sites.

Right: Claudia Cialone, Catherine Ralph and Tinnesha Nabulwad have an in-situ discussion about rock art site monitoring in Bolmo Dordokiyu custodial estate.



“It’s important to check rock art sites in wet season because we can see how the water moves over the art, or around the art sites. We noticed the water had been flowing through the rocks and over important rock art paintings, washing away the paintings and damaging the site - especially one of a horse showing the explorer Leichhardt. I noticed more damage to the site and more water and weeds around the area, so it was important to clean up around the sites from weeds. You also noticed much more growth in the wet season that could be fire risk in the dry season especially weeds.”
- Tinnesha Nabulwad,
Daluk bim officer



Above left: Jayden Wurrngkidj leads rangers in conducting cool season burning around rock art sites in Yurlhmanj in a joint project collaborating with Anbinik protection teams.

Above middle, middle, below middle: Wurnkomku clan estate rock art images. © David Hancock.

Below right: Mamardawerre rangers conduct rock art surveys and site recording in Yurlhmanj estate.

Above right: Rock art project officer Jayden explains to ranger Lorina Maralngurra the methodology of rock art survey and conservation recording.



Yurlhmanj

Custodial estate

Over four days in April, the rock art team and rangers from Mamardawerre camped at Makkalarl on Yurlhmanj clan estate, working collaboratively to protect rock art sites and Anbinik forests. Teams employed fuel reduction and early burning practices to prevent wildfire damage to rock art sites in the area. The rock art team was led by officers Tinnesha Nabalwad and Jayden Wurrngkidj, who coordinated site clean ups and ran assessments on the threats and damage to sites in the area. Under their leadership and guidance, teams worked closely together to protect each recorded site in Makkalarl. This resulted in over 20 sites being protected, monitored, and maintained before the wildfire season commences.

“We visited sites as a team and cleaned up by doing conservation and burning and flew out of camp with the helicopter each morning. We always work together as a team and help each other.”
– Tinnesha Nabalwad, Daluk bim officer



Highlight: Building a bim shelter at Miyene

Professor Berribob Dangbungala Watson is widely regarded as one of the most skilled bush craftsmen living in the Kuwarddewardde, and for over a decade he has led initiatives dedicated to intergenerational knowledge transmission, particularly in his area of expertise – material culture.

Supported by the Bim team, Berribob oversaw an exciting project that was conceived by Bordoh Landowners – protecting an at-risk rock art and occupation site at Miyene through the construction of a balabbala, or traditional shelter.

The vision behind the extension of the rock art site was traditional architecture and building techniques, whereby rock occupation shelters were expanded with the addition of a roof, protecting people and possessions from the weather. The Miyene shelter forms part of a pilot series for which similar customary conservation plans have been established, and will continue to be strictly monitored by rangers and Landowners.

Nawarddeken Academy students were thoroughly engaged in the project, learning from Berribob and rangers the skills of rock shelter protection, and the deeper reason to why sites such as Miyene are so important to Bininj.

Cutting bark was a meticulous procedure that involved 25 rangers both bininj (male) and daluk (female) from Manmoyi. Bark was extracted from numerous paperbark trees – cut from the top of the tree to the bottom, and then stripped down the middle. The strips of bark were peeled to release them from the fibres of the tree trunk and then burnt over a hot fire to flatten and harden, to be strong enough to use for the roofing of the shelter extension.

The team also used chainsaws to cut large trunks to use as main support pillars, with smaller, thinner branches interwoven with the bark placed on top as a roof.

The event was a celebration of kunmayali (customary knowledge and skills), where rangers and students were able to learn about the method from Berribob, who grew up camping in such shelters with his family. The event was documented in detail for the creation of learning resources for ongoing use by the Nawarddeken Academy.



Left: **A** Rangers begin bark extraction by cutting a ring around the top and bottom of man-bordokorr (stringybark).

Right: **B** Bark is carefully stripped from man-bordokorr. This can only occur in the wet or early dry season, when trees are moist enough for the bark to be extracted wholly.





Above left: **C** Rangers slowly heat and burn the bark to shape it, so it will cool in a flat form.



D

Above middle: **D** Rangers selected and cut forked logs to construct the pillars of the balabbala.



E

Middle below left: **E** Deep holes are dug to place the pillars of the balabbala.



F

Middle below right: **F** With the help of Nawarddeken Academy students, the team place the reshaped, flat bark on top of the founding pillars as a roofing material, to provide shelter and shade.



G

Above right: **G** A profile of the completed balabbala.



H

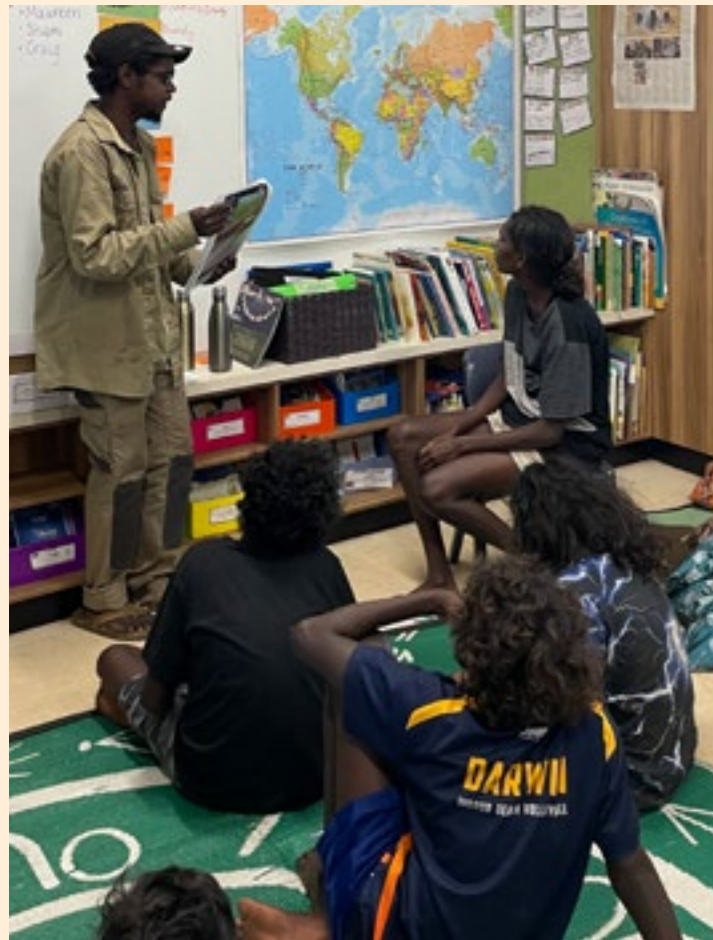
Below right: **H** Team photo of Manmoyi rangers and students from Nawarddeken Academy after a day of construction.



Working with Nawarddeken Academy

The Warddeken Plan of Management prioritises the development of a suite of learning units on Kunwarddebim to be integrated into the Kuwarddemalkno (seasonal calendar) Curriculum, taught in Nawarddeken Academy schools at each ranger base. The Kunwarddebim Project closely collaborates with Nawarddeken Academy educators to design units covering various aspects of rock art, such as managing sites, using technology for documentation, identifying fauna from rock art, and exploring living patterns in the Kuwarddewardde.

This collaboration meaningfully connects young people with cultural heritage sites, providing them with the skills to care for these important places. The hope is that through this engagement, students will take on active roles in the project as they grow. The formal incorporation of rock art into the Kuwarddemalkno Curriculum means an increase in the frequency of activities for children, and the creation of learning units hosted by Elders and Professors and supported by both the Nawarddeken Academy and the Kunwarddebim Project. Collaborative learning will continue to occur across the three ranger bases, both inside and outside the classroom.



Clockwise from top left: The Bim team worked closely with Mamardawerre coordinators and Nawarddeken Academy teachers to support the delivery of rock art training.

Students practice an important rock art conservation activity - removing fuel build up around art sites.

Students engage in a site clean-up exercise that mimics reducing fuel build up around sites.

Led by Jayden and Tinnesha, the team teach students how to clean up around art sites, and the importance of protecting sites from wildfire.

Manmoyi families come together to teach the stories of the rock art and why it's important to protect into the future.

Jayden Wurrngidj presents on the importance of managing against rock art threats and damage.

Rock art leadership

In March 2022, Warddeken created and filled two new Indigenous officer positions to join the Kunwarddebim team alongside the existing project officer and manager. These roles are aimed at growing leadership across younger generations of rangers in a field that, despite being based on Indigenous cultural sites and intellectual property, is dominated by non-Indigenous experts.

While building their skillsets and knowledge about rock art, the Indigenous officers assist with the key program operations of planning and delivering surveys and conservation actions for kunwarddebim located across the IPA. They undertake Landowner consultations regarding rock art; assist with reporting; plan and support collaborations with Nawarddeken Academy schools; engage with external stakeholders such as museums, universities and art centres; support data organisation and archival; and represent the rock art program at fundraising events and conferences.

Tinnesha Nabalwad and Jayden Wurrngkidj have been working in these roles for two years and one year respectively. During this time, these two remarkable young people have shown extreme dedication, commitment and professional growth. Increasingly, they are taking on more responsibility within the Rock Art program and attaining specialised cultural heritage management skills, and we are excited to see what the future holds for them.

We would like to thank Lesley Phillips, who worked for a year as the bininj bim officer with aptitude and skill, before having to leave the role due to family commitments.

“The bim (rock art) is our story, and we want to protect the bim from threats and natural damage. Protecting the bim and the Country is important, to keep the story and the Country alive so the future generation will know what the story behind this Country and bim is.”
– Jayden Wurrngkidj



Tinnesha Nabalwad
Daluk Bim Officer



Jayden Wurrngkidj
Bininj Bim Officer



Above: Tinnesha Nabalwad and the rock art team on the way to record rock art sites with Kakadu rangers during a rock art collaboration in Badmardi Country.

Above right: Rock art project officer Jayden documents rock art with Landowner Terrence Fredericks.



Below right: Rock art project officer Tinnesha Nabalwad works closely with Mamardawerre rangers in Yurlmanj to teach rock art recording on tablets.



NATIVE SPECIES

MAYH



Aspellita Guymala sets a motion sensor camera trap during the deployment phase of Warddeken's IPA-wide, long-term biodiversity monitoring program. © Kane Chenoweth

Warddeken's Mayh Program was initiated in 2017, and has since grown to become one of Warddeken's keystone programs.

The Mayh Program has two elements – a Biodiversity Monitoring Program, alongside a Species Recovery Program – which together aim to achieve biodiversity and biocultural heritage conservation through Bininj leadership and governance.

Across a suite of interconnected projects, Landowners and rangers implement long-term ecological monitoring, ecological research, and adaptive management to recover flora and fauna in the Arnhem Land Plateau. A priority of the Mayh Program is that is led and co-developed using a two-way approach that respects Indigenous and western sets of knowledge, ways of doing, and values. Australia's biodiversity crisis and decline in many endemic northern species is a well-known urgent issue for Landowners.

“Native animals are important in our Country because they have a connection with us, and we have a connection with them, and to the land. We want our native animals to come back - to maintain our cultural knowledge and pass this onto our children.”
 – Sarah Nabarlambarl Billess

2023-24 numbers
140 motion sensor wildlife cameras deployed
23 acoustic recorders
18 native mammals detected
7 feral animals detected
34 native birds detected
10 native reptiles detected
3 new detections of priority species



Below left: Ranger Recain Nabarlambarl and ecological monitoring officer Erica Smith during camera deployment. © Kane Chenoweth

Above left: Students from Nawarddeken Academy work alongside rangers to conduct habitat surveys. © Kane Chenoweth

Above right: Senior ranger Manoah Nawilil ready for a day's work deploying cameras. © Kane Chenoweth

Below right: Intergenerational learning is a priority for the Mayh Program, with students and young people annually engaged in biodiversity monitoring and conservation activities.

Above: Getting bogged – one of the challenges of running work programs in the wet season!

Below left: Manmoyi rangers undertake water sampling in Bordoh Country.

Below middle: To monitor and manage across the IPA, helicopters are an essential tool for the Mayh Program.

Below right: Tinnasha Nabalwad marks a tree with flagging tape to assist rangers locate motion sensor cameras when they are collected. Cameras are left in the field for a minimum of six weeks to collect data. © Kane Chenoweth

Far right: Warddeken again collaborated with rangers from neighbouring Kakadu National Park.



Monitoring network

8 clan estates

28 monitoring sites

140 motion sensor wildlife cameras deployed

40+ Indigenous participants

Monitoring network deployment

In March, rangers and Landowners from the IPA and neighbouring communities embarked on a comprehensive monitoring effort, surveying 28 sites across eight clan estates. This ‘monitoring bonanza’ trialed new methods to better understand local wildlife. While cameras have proven to be effective monitoring tools, they also have their limitations – for example, some animals live in trees, others are shy and avoid clearings, and many are not drawn to the bait used in typical camera traps. This year, in addition to using wildlife cameras, rangers deployed song meters to record mayh calls (capturing sounds from all species) and used environmental DNA (eDNA) sampling from water sources to detect which animals frequent freshwater habitats.

In total, the teams deployed 140 motion-activated wildlife cameras at 28 permanent monitoring sites and conducted vegetation surveys along the way. This impressive effort involved over 40 Indigenous rangers, Elders, and children, creating a truly intergenerational knowledge exchange. Alongside this work, rangers trialed additional passive sampling techniques like bioacoustic recorders and further eDNA testing, expanding their toolkit for understanding mayh biodiversity.

Conrad Maralngurra highlighted the potential for surprises in this work: “We sometimes find things that aren’t supposed to be found, and with this program, it’s possible to come across animals that have rarely been seen.”

The combination of advanced techniques will offer a richer, more detailed understanding of the wildlife that call the IPA home. Rangers displayed incredible dedication, completing all 140 sites despite enduring a one-in-ten-year flood that closed roads and created extremely boggy conditions. Their resilience has built excitement for the upcoming results.

Other highlights of the year include:

- Rangers and Landowners deployed and checked Felixer machines to help protect yirlinkirrkirrkir (the EPBC listed white-throated grasswren), and other small mayh in the Kuwarddewardde region between Manmoyi, Bod, and Kamarrkawarn.
- Daluk from Mamardawerre camped at Kurruwil for two nights to deploy cameras, song meters, and conduct eDNA sampling.
- After completing the final sites from Manmoyi community, the rangers visited a gorge on Djordi Country to unwind, relax, and fish.
- Warddeken hosted Njanjma rangers Connie and Delane Nayinggul, who helped complete monitoring sites at Mikkinj Valley.
- The entire team got bogged multiple times at Dinner Camp on the Mok estate, requiring a tractor rescue! They soon realised it would be easier to walk for the remainder of the week.

This year’s monitoring work, despite the tough conditions, sets the stage for an exciting new chapter of wildlife understanding in the IPA. The combination of Indigenous knowledge and modern technology has the potential to reveal previously hidden insights into the mayh populations of the region. We can’t wait to see the results!



Rangers from across all bases participated in ecological monitoring activities across the IPA.

Digital Women Ranger Program research partnership

Warddeken continued to play a key role in the Digital Women Ranger Program, a collaboration with CSIRO, CDU, and Indigenous women rangers from other organisations. Through this partnership, women have been supporting each other to integrate modern technologies with traditional ecological practices on Indigenous estates. The research team empowers other Indigenous women rangers, and each other, to blend these advanced tools with local cultural protocols. This focuses on enabling women to collect, use, and share data to care for Country. It is critical to build digital confidence through action-research projects, meaning training is applied with a focus on collecting data relevant to Landowners. Through a multi-faceted co-design approach with CDU and CSIRO, we developed a series of digital badges that formally recognise digital skills, that are co-verified by senior cultural and technical authorities, and awarded through Charles Darwin University.

Rangers working in the Mayh program have now received digital badges for skills in:

- Site Survey Using Camera Traps
- Site Survey Using Drones (Basic and Advanced)
- Digital Mapping.

The Mayh team has incorporated digital training for badges into the work program to give access to as many rangers as possible.

An important part of this program is making resources available to the wider Indigenous ranger community, so that others are empowered to use digital technologies to monitor and manage their Country in line with their community's needs. To aid this, the Mayh team has recently launched a series of guides on the Healthy Country AI website, which will guide ranger groups and coordinators through the following processes:

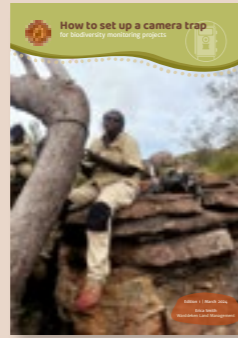
- Setting up a wildfire monitoring camera
- Setting up a CPW database and EcoAssist, using AI to remove empty images
- Introductory drone flying.

The program has also established a support network underpinned by cultural and governance charters, and a 'Digital Boss Lady Committee' comprising representatives from participating ranger groups, to guide the program's future. In its first year, Suzannah Nabalwad and Kayla Nagurrurrba represented Warddeken on this committee.

The full range of digital badges is available on the Healthy Country AI webpage – <https://healthycountryai.org>



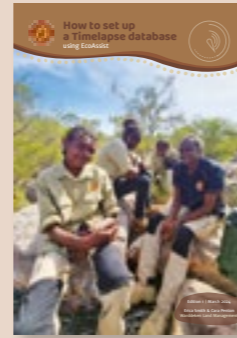
DIGITAL WOMEN RANGERS RESOURCES



How to set up a camera trap for biodiversity monitoring projects



How to set up a CPW database using EcoAssist



How to set up a Timelapse database using EcoAssist



Above left: Resources created through the Digital Women Rangers collaboration are available online.

Below left: Scanning the sky for drones during training.

Above: Students from Nawarddeken Academy loved learning about drones and how the Mayh Program can use them to track the condition of freshwater places.

Above right: Alexandria Namarnyilk has worked with Warddeken since graduating secondary school, and over the years has grown to become one of the most knowledgeable and adept rangers when it comes to camera deployments. © Kane Chenoweth

Below right: Rangers practice flying drones as part of practical training.





Above: Freshwater assessment training. © Kane Chenoweth

Below left: One of the benefits of working at freshwater sites – a spot of lunchtime fishing!

Above right: Students watch on in real-time as rangers fly drones over waterholes.

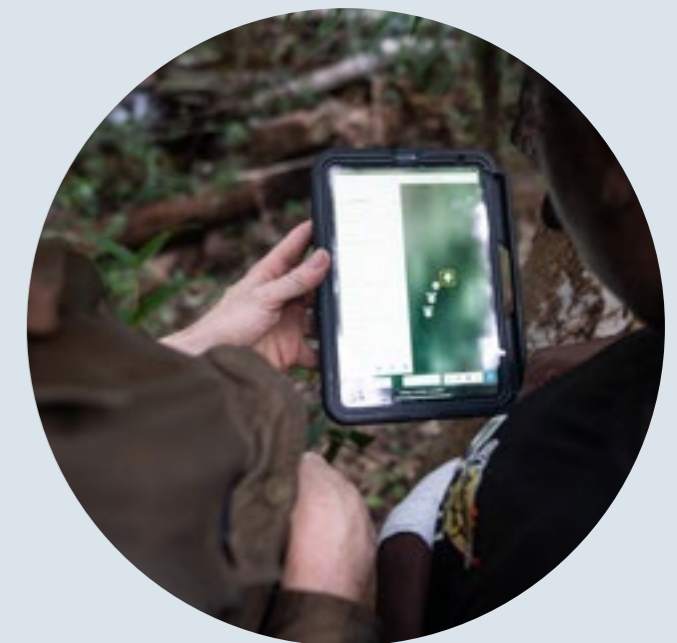
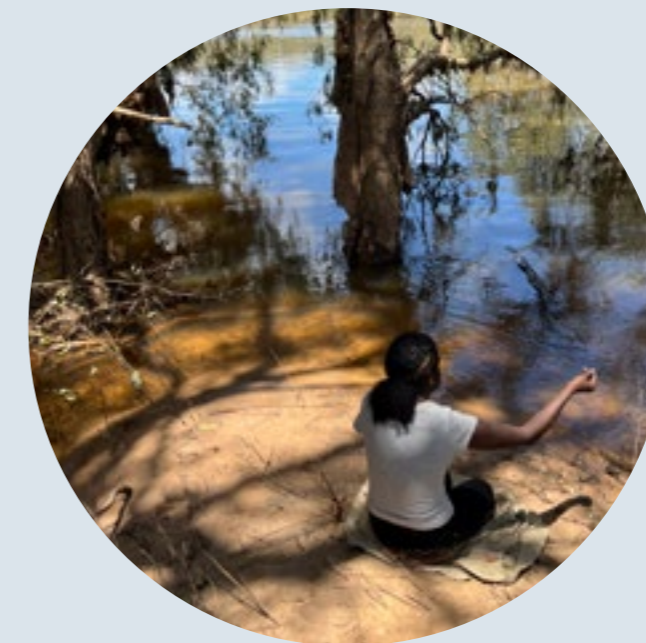
Below right: All activities undertaken as part of the Mayh Program are documented on tablet using custom programs. © Kane Chenoweth

Case study: Developing drone protocols and applying to waterhole assessments

In the first week of February 2024, the Mayh team and Mamardawerre community worked with CDU to run the first Introduction to Drone Flying Course for rangers and senior Nawarddeken Academy students. Rangers and students learnt how to safely use drones for ecological surveys. During the week, Bininj also came together to develop Cultural Protocols for drone use for Mamardawerre community. These protocols were co-developed and signed off by Elders and senior Landowners for the area, Janice and Margaret Nalorlman. In total, 16 rangers, five students and three support staff received digital badges for drone operations for ecological monitoring this year.

The team also applied digital skills to co-develop biocultural approaches to monitoring the impact of feral herbivores on waterholes in the Warddeken IPA, which included compiling high-resolution maps using drones. This approach not only bridges the gap between traditional conservation methods and modern technology, but also fosters female leadership and ensures that environmental stewardship remains deeply connected to Indigenous knowledge as well as priority species and places.

The significant impact of this initiative lies in its capacity to enhance ecological monitoring capabilities on Indigenous estates, while weaving in Indigenous cultural protocols, empowering Indigenous women and their communities to manage the impacts of changing landscapes and digital technologies.



KUNMAYALI KNOWLEDGE KUNWOK LANGUAGE AND DJANG SACRED SITES



Warddeken and Nawarddeken Academy now work together to host annual Stone Country bushwalks, which reconnect Landowners with Country only accessible by foot. The first Stone Country bushwalk was held in the late 1990s (before the existence of Warddeken or even the Manwurrk rangers) and we are proud to continue the tradition today.



- 12+ culture, language and site focused events
- 150+ participants across all events
- 1 bushwalk 68 attendees
- 1 Bininj (mens) camp

For Nawarddeken Landowners, customary knowledge and languages are vital components of managing Country, and caring for the many sacred places across the IPA remains of the utmost importance.

Translated simply, Kunmayali means knowledge in Kunwinjku, the dominant language of the Warddeken IPA. However, Kunmayali has a far more detailed definition, encapsulating intangible knowledge as wide-ranging as creation stories, the complex layers of kinship that define and give order to social life, the names and stories of thousands of individual sites, and intimate knowledge of the physiology and behaviour of Stone Country animals. Kunmayali also encompasses practical skills, such as navigating the Kuwarddewardde using landscape and environmental cues, preparing items of material culture, and performing cultural rituals such as increase ceremonies.

Not only do Landowners want to document their knowledge and languages for posterity, they want to create opportunities for younger generations to be enthusiastic about learning. Kunmayali and kunwok flow through all aspects of life on Country. Performing cultural practices such as visiting Djang, burning according to tradition and lore, collecting bush foods and preparing bush medicines, enacting ceremonies and performing increase rituals ensures that culture remains strong and that the Kuwarddewardde remains healthy.

For this to happen, young Nawarddeken must authentically connect with the knowledge being offered to them by their Elders, and Warddeken's role is to facilitate programs and events that meet this goal. Customary knowledge and practice are interwoven throughout the work program delivered by Warddeken rangers. This can include lighting fires at the right time of year in favourable weather conditions, understanding the key habitats and behaviours of endemic fauna species and being aware of the location of sacred sites while undertaking roadwork. In almost every way, kunmayali is an integral component of how Warddeken rangers manage the Kuwarddewardde.

In addition to giving primacy to customary knowledge within the ranger work program, Warddeken facilitates dedicated cultural events that are designed and led by Bininj, which centre around priority aspects of knowledge, language and sacred place protection. In the coming years, we hope to fund a dedicated project to focus entirely on the enormous and urgent task of safeguarding the customary knowledge essential to managing the Kuwarddewardde.



Above far left: Hands-on, intergeneration learning on Country. Photo by Cody Johnson

Far left: A group of walkers on the 2024 Stone Country bushwalk.

Far left middle: Professor Berribob Dangbungala Watson is one of the most revered and knowledgeable leaders of the Kuwarddewardde, who regularly oversees cultural activities and events.

Left: Michelle Bangarr harvests paperbark for the construction of a shade shelter.

Bininj manbolh (bushwalk)

A highlight each year is bringing together Landowners to plan and undertake a bushwalk following Bininj manbolh (customary walking and trade routes) through the Stone Country. The annual Stone Country bushwalk traverses multiple adjacent clan estates, with walkers camping at sites Old People once frequented, and lighting small, cool fires along the way. Bushwalks allow Landowners to spend time on Country rarely visited due to remoteness, and introduce young people to their clan estates. Held in collaboration with Nawarddeken Academy, the bushwalk is a major cultural event in the IPA.

This year, the walk involved 68 rangers, students, families and staff, who walked an impressive 90 kilometres over 12 days, from Kudjumarndi on Danek Country to Makkalarl on Yurlhmanj Clan Estate. On one of our longest ever bushwalks, the team navigated rivers, waterfalls, savannah woodlands, and Anbinik (*Allosyncarpia ternata*) forests, with each day an opportunity for experiential learning. Extended time on Country allowed families to share stories and kunmayali with younger generations over campfires, and perform early dry season ground burning in different landscapes. Walkers visited rock art sites, fished at important freshwater places, built a traditional balabbala (dwelling), caught kumuken (freshwater crocodile), and even saw an elusive yirlinkirrkirr (white-throated grasswren).

The legacy of Stone Country bushwalks stretches back more than two decades and this year's walkers continued a proud Warddeken tradition.



Scenes from the 2024 Stone Country bushwalk from Kabbari to Makkalarl show rangers, students and their families learning on Country, and simply enjoying spending quality time together out bush. Photos by Cody Johnson





Above: Jayden Wurrngkidj conducts early burning along the walking route. Photo by Cody Johnson

Left: Success! The group arrives at Makkalarl after 12 days of walking the Kuwarddewardde.

Right: Conrad Maralngurra, Warddeken director and chair of Nawarddeken Academy, leads walkers through a creek. Photo by Cody Johnson





Bininj (men's) camp

Our inaugural Bininj camp was a success, with rangers and Landowners from across bases coming together to discuss all things land and cultural management from a Bininj perspective. With daluk (women's) camps now a regular event on the work calendar, Bininj rangers requested a camp of their own, so they too could have the space and time for gender specific, on Country learning. Alongside structured conversations about the unique role played by Bininj rangers in work programs, particularly around cultural relationships and obligations, the camp was an opportunity for men to enjoy fishing, rock art site visits and movie nights.

Place Name Project

The Place Name Project is led by senior ranger and board member Terrah Guymala from the Manmoyi ranger base, who for the last six years has worked to uphold knowledge of the hundreds of named sites throughout the IPA. Through the production and installation of signage across clan estates accessible by road, the project actively promotes the ongoing use of Bininj place names. A digital database is also maintained by Terrah, with work continuing on the integration of this data into Warddeken's Bidwern archival database.

The Place Name Project represents one of Warddeken's many efforts to make knowledge and language more visible across the IPA, and to encourage their use in the workplace, recognising that knowledge is more likely to be absorbed across generations if it's being used on a day-to-day basis. Terrah comments that since the Place Names Project started, he has noticed more people using the correct, specific names of places (rather than just the more commonly known sites), and also that a much wider range of place names are being used by younger people. This is powerful, demonstrating the impact of supporting and resourcing locally-designed efforts to conserve unique Stone Country knowledge systems.

Maintenance of existing signs and the installation of new signs has taken place throughout the IPA during the year, with a continued focus on the Bordoh, Djordi, Rol and Kurrulk clan estates in the Manmoyi region.

Over the last year, the Place Name Project has successfully incorporated place names for an additional six clan estates, solidifying the project's presence across all three ranger bases. The new site records prompted the creation of new signage, which was prepared and painted, ready for installation in the dry season of 2024.

In late 2023, a workshop facilitated by Terrah was conducted at Mamardawerre ranger base. Terrah's workshop brought together rangers, Landowners, Djungkay, Elders, and children, and focused on use of the project software, and the cultural knowledge of specific site names. A bilingual instructional video was created as part of the workshop, to support rangers who are new to the project carry out work independently.



Images from the inaugural bininj (men's) camp.



Nawarddeken Academy

Without a doubt, one of Warddeken's proudest achievements is forming the Nawarddeken Academy in 2015 – a vehicle through which quality, bicultural, full-time education is being delivered for the first time at three IPA communities. Nawarddeken Academy is now a successful independent organisation in its own right, however, our companies remain interconnected through our shared origin, membership and vision for the future of the Kuwarddewardde.

Before this life-changing accomplishment, the idea of full-time education in the IPA had been discussed for many years, with Warddeken rangers and families advocating across all levels of government to no avail. Rangers wanted education to be delivered on Country, so they could remain living and working at homelands; Elders and parents wanted bicultural education, to make their children strong in two worlds. The dream of full-time schooling in the Kuwarddewardde was realised when, with the generous support of the Karrkad Kanjdji Trust (KKT), the first Nawarddeken Academy school was established at Kabulwarnamyo in 2015. In a scarcely resourced one-teacher 'classroom', under native cypress poles and a tarpaulin, full-time education in the Kuwarddewardde commenced.

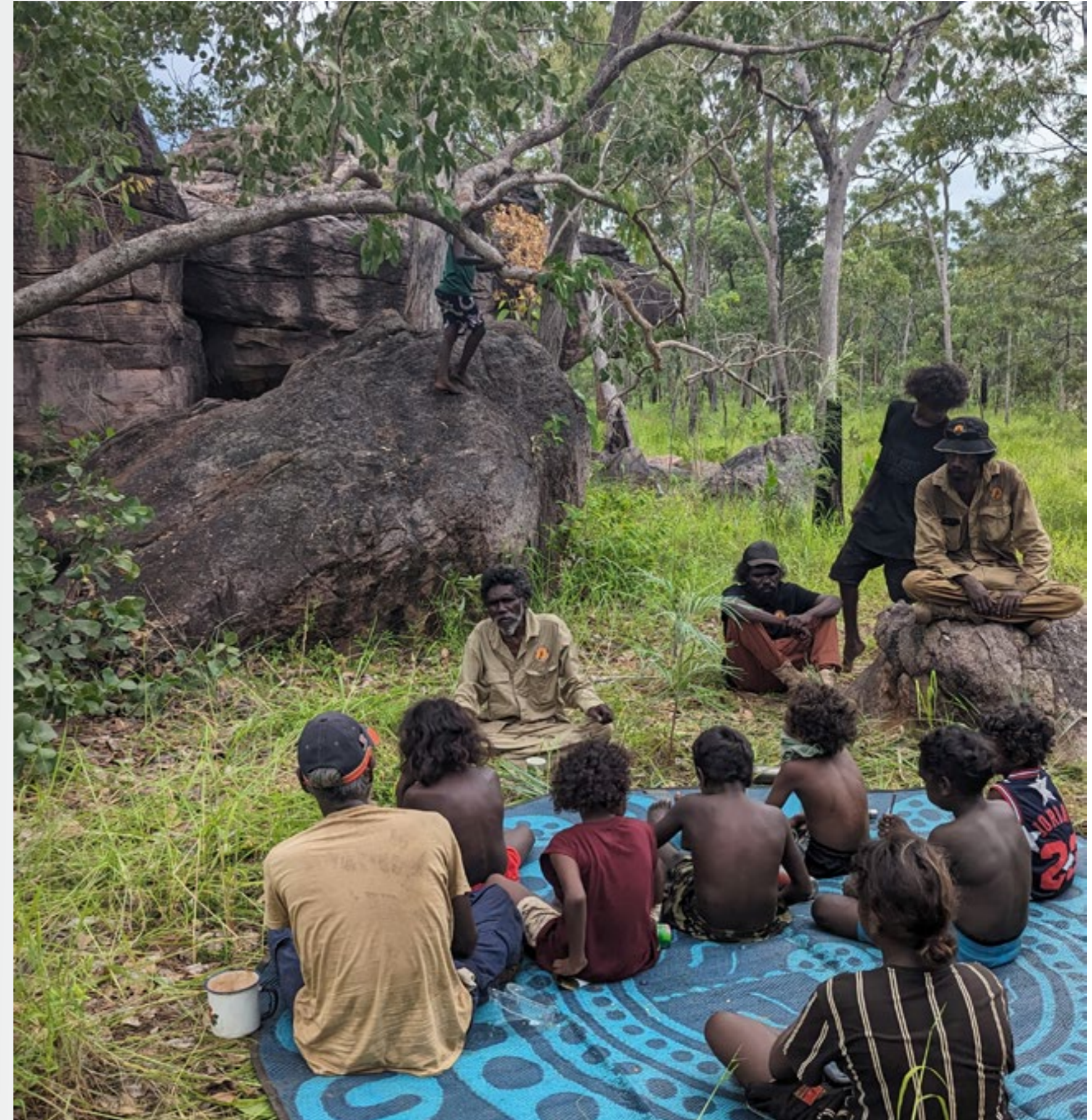
Since 2015, Nawarddeken Academy has established two additional schools at Manmoyi and Mamardawerre, mirroring the location of Warddeken ranger bases; gained independent school registration for all three schools; established early learning programs; and most recently, applied for secondary registration.



Above left: Zacharia Namarnyilk and daughter Maureen, who is currently completing Year 12 at Nawarddeken Academy. In 2024, Maureen undertook work experience with Warddeken, assisting her father conduct Landowner consultations for the annual burning program.

Below left: Students work with rangers to set out motion sensor camera traps.

Right: Professor Berribob Dangbungala Watson is one of the most revered and knowledgeable cultural leaders of the Kuwarddewardde, who regularly oversees cultural activities and events. Here, he shares with students and younger rangers his own personal experience of living in the Stone Country.





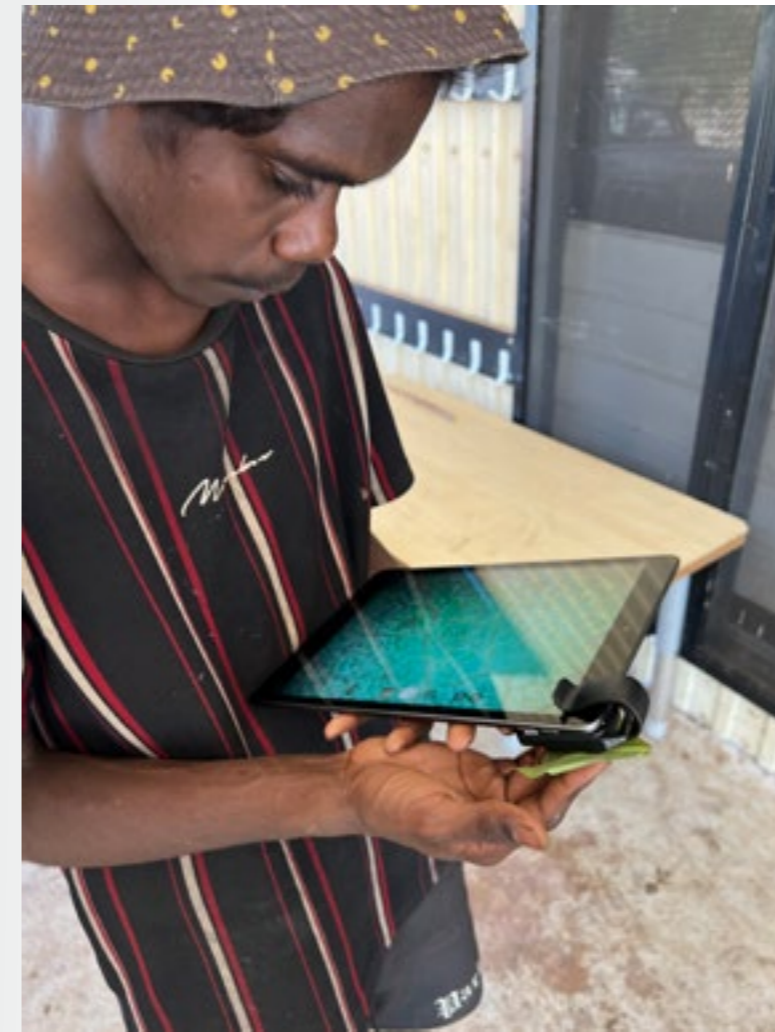
Clockwise from above left: Nicholas Nadjamerrek tries on a helmet during an activity with Kabulwarnamyo rangers focused on helicopter safety.

Mamardawerre coordinator Paris O'Rourke assists students to undertake biodiversity surveys.

Senior students from Manmoyi were more engaged than ever this year, working closely with the Mayh and Kunwarddebim Programs.

Senior students from Mamardawerre learn an important bush skill - butchering animals. Buffalo and wild cattle are a major food source for homeland community residents, supported by the ongoing culling efforts of rangers.

Digging for mankung (wild honey) on a weekly bush trip.



Warddeken and Nawarddeken Academy's enduring collaboration continued via weekly learning on Country trips, exposing students to a range of new cultural sites, environmental habitats, and locations around their communities. The trips provide a recurrent space for young Nawarddeken to absorb skills and knowledge for managing Country.

Some of the highlights of the year's partnership include:

- Rangers educated students on water safety, with a particular focus on crocodile safety and customary knowledge of kinga (saltwater crocodiles).
- During the feral culling program, rangers led a meat cutting and butchering lesson for the students, where they learnt the many different names of the cuts of meat in Kunwinjku. Rangers and students filmed videos to document information about the culling process. Daluk rangers and senior Professor Margaret Nalorlman took students turtle hunting on the Gunbalanya floodplain to show them how to hunt long-neck turtles, tell stories and share knowledge about turtles and place.
- Students from Mamardawerre joined the two-week bushwalk in May for an unforgettable experience on Country alongside rangers, families and Elders.
- All schools continued working with the Mayh Project on a range of activities including setting up song meters to record important bird species such as yirlinkirrkirr (white-throated grasswren) and setting motion sensor cameras for biodiversity monitoring.
- All schools continued working with the Bim Project to visit rock art sites, learn from cultural leaders, participate in cultural heritage surveys and undertake conservation activities.
- Ongoing learning from Elders and rangers about a variety of bush food and medicine plants, how to harvest and prepare them, and their uses.
- An art workshop at Kabulwarnamyo in collaboration with Marrawudi Arts and Culture, focused on customary knowledge of mankung (native honey), both ecological and spiritual.
- Helicopter safety training delivered by rangers and chopper pilots.

DALUK

FEMALE RANGERS



Alexandria Namanyilk records video footage of Tinesha Nabalwad undertaking water sampling, to be used in training resources for other ranger groups.



Warddeken's Daluk Engagement Program was established in 2017 to build a strong female workforce and create gender equality within the workplace. Built around Elders and senior women who are positive female role models, the program has seen Warddeken's employment of women grow steadily. Importantly, the program engages daluk across a wide age-range, from teenagers to Elders. Responding to the localised interests and needs of women across the Warddeken IPA has created a diversified and flexible work program that has led to positive changes in our workforce statistics.

Across each ranger base, daluk have continued to reach program milestones and objectives while building the skills and capacity to play key roles in carrying out land management activities. These include rock art maintenance and surveys, supporting the biodiversity monitoring program in wildlife camera trap deployment and data management, Anbinik forest protection, early dry season fire management and many activities centered around traditional knowledge transfer.

Amongst many successes, these are some of the highlights of the past year:

Daluk camps

Gender-specific daluk camps were started in 2020 as a means to bring together daluk rangers to reflect on the work program and plan for the year ahead, as well as provide an opportunity to focus on cultural learning in the context of women's business. In September 2023, a daluk camp was held at Ngaldadubbe on the banks of the Liverpool River. The camp created a safe space for women working with Warddeken to discuss the unique challenges and successes of being a daluk ranger. Through collaboratively workshopping ideas to address these sometimes sensitive issues, we are able to gain insight into how to adapt Warddeken's work programs and activities to improve the workplace, and increase workforce participation, for daluk.

A team of daluk rangers from Mamardawerre travelled to Pudukul for the third annual Strong Women for Healthy Country (SWFHC) Forum. These events are an opportunity for Indigenous women from across the Northern Territory to come together to share, learn and draw inspiration from each other.



Above left: Documenting Mary Kolkiwarra Nadjamerrek's vast knowledge of mankung (wild honey). Unlike western science, Bininj recognise and have names for multiple species of native bees.

Below left: Rangers and students from Kabulwarnamyo worked together to create artworks such as this painting of Ngalyod (the rainbow serpent). Photos by Katie Hagebols

Above right: Ashaleena Guymala and her young son outside the Manmoyi office.

Below right: Lorena Maralngurra during camera deployment.

Far right: Daluk from Mamardawerre take a break from on ground burning to harvest colour to dye pandanus.



Kunmayali

Throughout the year, daluk continued to play an important role in keeping kunmayali strong within the IPA. This work includes working closely with Nawarddeken Academy schools in delivering learning on Country activities and continuing the development of the Manme dja Manrakel (Bush food and medicine) project.

Anbinik Protection

Women continued to be heavily involved in delivering the annual Anbinik Protection Program. Daluk rangers and coordinators were involved in the protection of 17 Anbinik patches this early dry season, with a mix of younger and more experienced daluk working together.

Digital Women Ranger Network

The Digital Women Ranger Network is a collaboration supported by the Telstra Foundation, CSIRO, CDU, and North Australian Indigenous Land and Sea Management Association (NAILSMA) that is developing and supporting Indigenous rangers and land management groups to explore how digital technologies such as camera traps, touch GIS, and drones can be used in the right way to monitor significant species and habitats while supporting Landowners' aspirations for their Country. Through online, regional, and on Country workshops, Indigenous women rangers have co-designed digital inclusion pathways and undertaken digital training with the goals of improving digital literacy and empowering them to translate digital skills into culturally appropriate ranger work opportunities.

Warddeken daluk rangers have practiced telling small stories with data, helped develop digital and cultural protocols surrounding data and digital technology, and shared their skills in digital technology with other women rangers in peer-to-peer learning. Warddeken daluk rangers have been sharing their skills in deploying camera traps, processing this data in a bilingual database for mayh (animals), and how daluk report these findings back to Landowners. With other women rangers from Jawoyn, Crocodile Islands, Kakadu, Djurrubu, Mimal and Djelk, we have attended workshops in Nitmiluk, Darwin for the TNRM conference, and brought together families at Manmoyi outstation. This gathering at Manmoyi was a highlight for the daluk ranger program at Warddeken, as connecting with family and other women ranger groups helps make us stronger. We look forward to deepening these connections and skills going forward to care for Country.

Mimal Camp

Warddeken hosted our partners Mimal rangers, and their Learning on Country program, for a camp focused on intergenerational knowledge and language transmission. Camping together with the Nawarddeken Academy, the event was an opportunity for Elders and Dalabon speakers Mary Kolkiwarra Nadjamerrek and Dudley Lawrence to share the endangered Dalabon language with young people.



Clockwise from top: Mamardawerre daluk during the Mayh Monitoring Program.

Rangers often document work activities for inclusion in the Bidjerrin database and to create reports to share with Landowners.

Daluk visited the 'cold cave' near Kabulwarnamyo en route to a culture camp.

Suzannah Nabalwad during incendiary machine training.

Daluk from Manmoyi pose with a sign advising travellers to the IPA that no more fires are to be lit.

Tahnee Nabalwad behind the wheel.





KUKKU

FRESHWATER PLACES

Nawarddeken are freshwater people, with the Warddeken IPA encompasses an extensive network of freshwater rivers, streams, billabongs, and fragile spring-fed upland wetlands.

Freshwater places can hold cultural significance for Bininj as the resting places of Ngalyod (the powerful rainbow serpent) or yawkyawk (mermaid spirits). Often, these places have strict visitor and behavioural protocols. Many Djang (Sacred Sites with spiritual associations to a particular element) are located within or beside freshwater. Some Djang require the performance of ritual increase ceremonies, an activity that is supported by Warddeken rangers and staff.

Many other freshwater ecosystems are a crucial source of bush food to this day, providing sustenance such as fish, turtles, water chestnuts, and water lilies.

The significance of these freshwater ecosystems extends beyond cultural and spiritual dimensions, with springs, creeks and rivers serving as essential sources of drinking water for local communities, ranger bases, and Landowners who spend time on Country.

Due to the notable concentration of buffalo in the escarpment regions, especially around fragile freshwater sites such as perched wetlands, culling efforts in the Warddeken IPA strategically focus on these areas to achieve maximum impact. Every culled animal is documented, including details such as species, quantity, and location, which are all logged using GPS technology.

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

Extensive ecological monitoring efforts within the Warddeken IPA have demonstrated that the management of feral herbivores plays a critical role in the conservation of threatened species in the region – more so than previously recognised. When coupled with effective fire management, the continuous suppression of large herbivores can yield significant improvements in vegetation and native species habitats.

A billabong downstream of Mamardawerre community and ranger base. © Kane Chenoweth

FERAL ANIMAL CONTROL

Since 2007, Warddeken has performed annual aerial culling for feral animals within the IPA, marking one of the most enduring and extensive culling initiatives in any protected area in Australia. The commitment to aerial culling has seen a progressive increase in both its intensity and coverage over time, with 2023 culling efforts targeting an approximate area of 550,000 hectares, the largest area surveyed to date. This expansion underscores the dedication of Landowners to mitigating the impact of feral animals and promoting the overall health of Country.

In late 2023, the Bininj Feral Management Team, supported by the Mayh Program, assumed leadership roles in coordinating the annual feral animal removal program. Arijay Nabarlambarl and Lindsay Whitehurst took on pivotal roles in conducting face-to-face consultations, mapping aerial tracks, and leading aerial shooting operations across 25 clan estates. Zacharia Namarnyilk, Manoah Nawilil and Greg Lippo were also part of the team, conducting aerial shooting and turning data into maps. The Bininj Feral Management Team led all aerial shooting operations and school engagement activities across three bases, while a team of rangers butchered meat and prepared it for delivery all over Arnhem Land.

Program Highlights

- Bininj Leadership: Arijay Nabarlambarl and Lindsay Whitehurst emerged as key leaders within the team, each bringing unique strengths and contributions. Together, they co-delivered the program, capitalising on the co-benefits of training, community engagement, and meat delivery, all while advancing the aerial shooting operations across the three ranger bases.
- The capacity-building efforts of the Bininj-led Feral Animal Management Team have yielded remarkable results. The team's ability to take on leadership roles,

upskill in crucial areas, collaborate effectively, and engage with communities has not only strengthened their capabilities but also enhanced the success of the feral animal removal program within the Warddeken Indigenous Protected Area (WIPA). This capacity building not only benefits the team but also contributes to the broader goals of biodiversity conservation and community empowerment.

- Community and Educational Outreach: The feral management team extended its efforts to educate communities at Mamardawerre, Manmoyi, and Kabulwarnamyo. They facilitated meat deliveries to these communities in collaboration with Nawarddeken Academy, educating community members on the proper butchering techniques for feral cattle and buffalo. These activities reinforced the importance and purpose of the feral animal removal program.
- Nawarddeken Academy students actively participated in community meat butchering events in Mamardawerre, Manmoyi, and Kabulwarnamyo. Ranger teams, in collaboration with the Bininj Feral Animal Management Team, organised these events to educate students on the art of butchering whole animals, and to explain the purpose behind the feral animal management program. In Mamardawerre, students were provided with the opportunity to learn the names of meat cuts in both Kunwinjku and English, as well as gain knowledge about the internal organs used in cooking. Culture Tech facilitated the creation of digital representations using augmented reality (AR) technology on iPads, enhancing the educational experience. With guidance from Bininj and daluk rangers, all students actively participated in hands-on activities such as skinning and identifying various aspects of animal processing, fostering a deeper connection to traditional practices and cultural knowledge.
- A total of fourteen feral cattle and buffalo were butchered and delivered to Landowners at various communities and locations, including Mamardawerre, Mandilbarreng, Manmoyi, Yikarrakkal, Malgawo, Kabulwarnamyo, Jabiru, Gunbalanya, Barunga, and Maningrida.



Aerial
886 buffalo
10 cattle
282 pigs
Total aerial = 1178

On ground
99 buffalo on ground
18 pigs on ground
9 wild cattle on ground
Total on ground = 126

Bininj Feral Management Team
Arijay Nabarlambarl, Lindsay Whitehurst, Manoah Nawilil, Greg Lippo, Zacharia Namarnyilk

Butchering operations in full swing during the 2023 aerial cull. Meat was frozen and distributed via a travelling cool room to Landowners whose clan estates were included in the cull.

WEED CONTROL

While the Warddeken IPA maintains a relatively low level of weed presence compared to surrounding areas, there are still several weed species of concern that require consistent and long-term management.

Warddeken rangers deliver annual weed management activities across homeland communities, roadsides and other known infestations throughout the IPA. Rangers are always on the lookout for additional weed infestations or new invasive species posing a threat to biodiversity within the IPA.

Warddeken's weed control programs are designed with a dual focus: firstly, preventing the spread of weeds, facilitated by factors such as vehicles, feral and native animals, and wet season flooding; and secondly, gradually working towards the eradication of specific invasive weed species. Targeted species in the IPA include annual mission grass, perennial mission grass, mimosa, rattlepod, hyptis, sida, caltrop, gmelina, neem, and gamba grass.

Warddeken undertakes weed control from December to April, depending on weather conditions. Weed control efforts are focused around outstations and roadsides and are achieved using herbicides and hand pulling.

Conducting weed control during the wet season presents logistical challenges, necessitating thorough preparation. The wet season conditions restrict travel via road, compelling rangers to utilise helicopters for transportation to various homelands within and around the IPA.

In March 2024, Mamardawerre rangers treated and surveyed weeds along the Arnhem highway from Wurogoij crossing to Marlwon outstation. Spraying also occurred at the dwellings and infrastructure at Table Hill community (unoccupied). Areas of significant weed infestation included the old quarry, 'hyptis hill' and the roadside near Wurogoij crossing. The largest infestations comprised primarily of

hyptis, rattle pod and sida. Mission grass was found in the old quarry and just east of the quarry along the highway. All weeds were treated with a glyphosate mix dispersed by a quickspray unit.

A team of rangers was ferried by helicopter to Kudjekbinj community, where they camped and undertook widespread weed control. The main weeds encountered were rattlepod, sida, hyptis, and a small patch of mission grass. All infestations had grown slightly larger than the current map area, although no weeds were located in any new areas. The team also dropped into the old community of Kunbolombolom, confirming that there was no presence of mission or gamba grasses.

Weed control and survey at Mamardawerre commenced after the end of the wet season, during the period early in the year before weeds have seeded. The most common weeds treated were rattlepod, hyptis, sida and mission grass. This year the majority of weed control at Mamardawerre was undertaken with 15L backpack spray units.

Due to understaffing, Kabulwarnamyo rangers did not complete any roadside weed control activities this year. Rangers, in partnership with Nawarddeken Academy students, ran a series of hand pulling weed control activities across the community.



Senior ranger Suzannah Nabalwad deserves recognition for her hard work in weed control activities. Now with almost a decade's experience, Suzannah made a massive contribution to this year's weed management program.

WILDFIRE SUPPRESSION

A core element of Warddeken's annual fire management program is strategically responding to destructive wildfires during the late dry season, the hottest period of the year. In recent years, the challenges of firefighting in the Kuwarddewardde have intensified with the impacts of climate change. The evolving weather patterns, characterised by drier wet seasons and prolonged, windier, and hotter dry seasons, have made wildfire suppression increasingly difficult.

Despite escalating challenges, Warddeken rangers remain committed to responding to wildfires as required, protecting ecosystems and cultural sites within the IPA and maximising the avoidance of carbon emissions.

A total of 23 wildfires were attended to by Warddeken Rangers in 2023, with a total of 53 rangers and support staff engaged on the fire line. The fire suppression season commenced on the 2nd of August, with rangers monitoring for new ignitions right through until the end of the year.

As in previous years, primary wildfire ignition sources were early dry season aerial burns that flared up again from smouldering logs, people burning during fishing and hunting activities, and dry 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 attended was successfully dealt with.

Rangers from all three bases committed 2721 hours to fire suppression, and their efforts were supported by the Bawinanga Djelk and Mimal rangers throughout the season.

The perseverance and hard work of our rangers proved effective in restricting the total area burnt by late dry season wildfires to only 2.8 per cent of Warddeken's fire management area – another strong outcome under the WALFA project.

A special thank you to the team at ALFA for their ongoing support of firefighting efforts at Warddeken, and across Arnhem Land.

23 wildfires controlled
53 rangers involved
2.3% IPA burnt late dry season



Above: Backpack leaf blowers are a ranger's best friend in wildfire season, allowing them to blow flames and embers back in on themselves, creating mineral earth breaks from which to firefight.

Right: A crew of Mamardawerre rangers prepares to deploy to a remote wildfire via helicopter.



KUNRED COMMUNITIES



Above: An aerial shot of Kabulwarnamyo homeland community – the location of Warddeken’s first ranger base.

Right: Tahnee Nabalwad collects a food order from a charter pilot on the fortnightly tucker run.

There are seven homeland communities within the Warddeken IPA, four of which are currently occupied permanently. As one of only a handful of organisations in Australia based from homelands, Warddeken is deeply committed to supporting and advocating for Nawarddeken who live in these remote and chronically underserved communities. Where possible, Warddeken works alongside communities to increase road access, improve environmental health conditions and contribute to sustainable futures on Country. Warddeken is the registered Homelands Service Provider for Kabulwarnamyo and works with Demed Aboriginal Corporation to provide services for the people of Mamardawerre, Manmoyi and other communities within the IPA.

Kabulwarnamyo service provision

Warddeken is the registered Homeland Service Provider for Kabulwarnamyo community (other communities in the IPA fall under Demed Association), however, due to NT Homelands Association criteria to classify dwellings, only the one-stone house in the community is eligible to receive funding. The balabbala dwellings which characterise Kabulwarnamyo do not meet the criteria, despite many being occupied for almost two decades. With only one dwelling eligible for annual funding, there is little money to support essential infrastructure at Kabulwarnamyo, such as toilets and bathrooms. Warddeken rangers provide many community services in-kind, such as rubbish collection and ongoing repair and maintenance of the dump, airstrip, and balabbala dwellings. This year, the funding received for Kabulwarnamyo was used to install a UV filter for the bore to improve the quality of drinking water.

To address mounting infrastructure issues at Kabulwarnamyo, it was decided to commission a Community Master Plan, with Ekistika engaged to work with Landowners to create a roadmap for the future. Consultations commenced in 2022 and continued throughout 2023, with a final plan endorsed by Landowners in early 2024. The Kabulwarnamyo Master Plan is already being used as the basis to apply for funding to support urgent community upgrades to housing, bathrooms, toilets and wastewater. Importantly, upgrades incorporate the needs of long-term community members facing increased mobility issues related to illness and ageing.

Food security

Residents of the Warddeken IPA face ongoing challenges in securing food supplies due to the region’s remoteness and a lack of nearby food stores. This issue becomes particularly difficult during the wet season when road access is unavailable. With private vehicle ownership rare and air charters prohibitively expensive, communities across the IPA have historically struggled with food insecurity.

To address this, Warddeken, with support from the Karrkad Kanjdji Trust (KKT) and Simplot, has operated a fortnightly food delivery service via charter plane to the three ranger bases for the past ten years. This service is provided free of charge, with Warddeken administrative staff assisting rangers and community members in placing food orders from the IGA supermarket in neighbouring Kakadu National Park, using their wages or Centrelink income for payment. IGA staff pack the orders, which are then flown in by Kakadu Air and delivered to each IPA community. This essential service ensures reliable food access for Landowners in the IPA, significantly improving food security.

In early 2022, the Nabiwo Store at Kabulwarnamyo was opened, also supported by KKT and Simplot. The store, housed in an eight-foot sea container, is stocked with essential dry goods such as tea, milk, canned goods, toiletries, and sanitary products. It supplements the fortnightly tucker run, adding another layer of food security for the remote ranger bases. Daluk rangers from Kabulwarnamyo, working closely with the base coordinator, manage sales and stocktake, with plans to expand their responsibilities and eventually take full management of the store.



Mechanical works

A trained diesel mechanic has been working with Warddeken since 2015, to oversee the important task of maintaining and repairing Warddeken's fleet of vehicles, plant machinery and equipment such as leaf blowers, chainsaws and generators. Rangers often work alongside the mechanic, and those who express a particular interest in mechanics are supported to work directly with the mechanic to improve their skills. With Manmoyi and Mamardawerre ranger bases now having their workshops equipped with a mechanical hoist, the mechanic can work alongside rangers from all three bases, improving the overall mechanical skills base.

Over previous years Warddeken has struggled to employ a full-time mechanic, and so to ensure this didn't impact the on-the-job training aspect of Warddeken's mechanical works program, a contract mechanic has been engaged to continue working alongside rangers to manage the fleet.

Remote ranger bases

Rangers conducted maintenance at Kurruwil (September 2023) and Kudjumarndi (October 2023) seasonal camps during the reporting period. This included re-tarping the two structures at Kudjumarndi. The remote base at Makkalarl is functional but in need of repairs, which were documented and have been built into the works program for next dry season.



Clockwise from far left: A repainted sign at the entrance of Manmoyi.

Bush mechanics – part and parcel of remote work. Here, senior ranger Freddy Nadjamerrek, a skilled mechanic, advises younger rangers on mechanical issues.

A newly installed speed sign in Manmoyi.

Rangers maintain the Manmoyi office building by replacing broken timber decking.

Leron Guymala repairs a loader tyre in the Manmoyi workshop.



Highlight: A road to Mokokalbam

For more than a decade, Warddeken Landowners have dreamed of building a road to open up the remote karrikad (western) region of the IPA – Country previously accessible only by helicopter. The terrain in the clan estates of the western IPA is formidable – cliffs, rocky outcrops, rivers, escarpments, and densely timbered savanna woodlands. As such, the road has been in planning for years, with aerial assessments undertaken opportunistically as part of annual APB and feral animal culling operations.

In September 2023, on an epic three-week work camp, rangers built an entirely new 40 kilometre road into Bolmo Dordokiyu Clan Estate, opening up the western region of the IPA for the first time. The road pushes through to Mokokalbam – a beautiful, sandy, open area on the East Alligator River suitable for future infrastructure.

The team, led by the experienced Stuart Guymala and Jake Weigl, were motivated and professional. Building the road involved bush camping for extended periods was physically demanding, and, on some days, felt like a lot of effort for very little reward. Despite this, the entire crew rose to the challenge, remaining positive and working long, hard days for the entire trip. The hard work paid off, and the team was joined to build the final stretch of road by Landowner Fred Hunter, who had been unable to visit his Country for five years.

The road to Mokokalbam opens up rock art rich Country with significant habitat refuges for mayh (animals). During the weeks of road building, the team rediscovered dozens of art sites, details of which were provided to the Bim Rock Art team. A shout out to the rangers who toiled, sweated, hauled rocks, cleared scrub and worked morning until night on this job. The road they built brings new opportunities for land and cultural management in the west of the IPA and offers Landowners increased access to Country.



Scenes from building the track to Mokokalbam – the first time vehicles have been able to access the southern regions of karrikad (the eastern ward of the IPA).





Scenes from building the track to Mokokkalbam - the first time vehicles have been able to access the southern regions of karrikad (the eastern ward of the IPA).

TRAINING

Not only is training essential in building the capacity of the Warddeken workforce – feedback from our rangers shows that they are keen and enthusiastic to learn more, gain additional skills and receive qualifications that add to their ranger credentials. A robust training program was delivered throughout the year, offering varied units of competency and delivered via a range of methods – all of them on Country. In addition to accredited units of competency, rangers provide peer-to-peer on-the-job mentoring, supporting newer and younger rangers to gain confidence within the workforce. Some of the year’s training highlights include the following.

Firearms

A and B-class firearm training initiatives were conducted at Manmoyi and Kabulwarnamyo, involving ranger coordinator staff, three Bininj rangers and two daluk rangers. Senior ranger Zacharia Namarnyilk completed his D-class firearm training through side-by-side mentoring by experienced trainer Pat Carmody and accredited rangers Lindsay Whitehurst and Arijay Nabarlambarl; going on to successfully obtain his aerial platform license. Zacharia has worked with Warddeken for more than a decade now, and these qualifications reflect his ongoing commitment to development and professional growth. Using these new skills, Zacharia went on to play a key role within the feral animal management team during aerial culling operations.



Above: ALFA's custom training in operation and use of the Raindance aerial incendiary machine.
Right: Daluk rangers participate in scenario-based remote first aid training – fake blood and all!





Above left: Mental health first aid training was provided through our partnership with Bidjerna Butj Uni, the first time such training has been delivered in the IPA.

Left: Young daluk rangers undertake on-the-job training in the use of Felixr machines.

Right: Ninti One workplace skills training introduced rangers to administration and technology skills specific to the Warddeken workplace.



Mental Health

Many senior Landowners, along with Warddeken staff and directors, requested specialised training to equip them with knowledge and skills to better handle the mental health crises that can occur within IPA communities. In response, Warddeken, with the support of the Bidjerna Butj Uni initiative, arranged the delivery of on Country mental health training. Participants in the program felt they came away having learnt valuable skills, and recommended that this important training become a regular feature within the training program.

Biodiversity

The Mayh Program has helped create online training resources related to technology and biodiversity, recognising that the digital badge training units offer an accessible way for rangers to learn on Country. Several rangers with an interest in technology have completed these digital badges, in the process expanding their IT skill sets. Following the training in early 2024, rangers then went on to use some of their newly acquired skills, including using touch GIS during consultations with Landowners, to live-map their priorities for early season burning.

Workplace Skills

Ninti One specialises in delivering on-site, work-based training in remote First Nations communities, and our partner Nawarddeken Academy generously allowed rangers to participate in the training they organised. Participants completed the first units of the Foundation Skills for Your Future training program, which focused on developing workplace skills such as reading workplace forms and planning documents and policies. Trainer Robyn Ellis has now travelled to the IPA numerous times and shares an amazing rapport with participants. Training also included foundational IT skills across laptops and iPad devices, including using Teams meetings.

Fire management

Arnhem Land Fire Abatement (ALFA) NT training manager Mark Desailly travelled to the IPA to support a number of rangers attain mastery of the Raindance incendiary machine used for aerial burning, and aircraft compete safety qualifications. Our partners at ALFA provide ongoing training through their custom training program, which has resulted in widespread upskilling of rangers in fire management activities.

First Aid

The remoteness of the IPA necessitates a need for our workforce to know how to respond to emergencies if they occur. First aid training has been an annual feature of Warddeken's training program for over a decade, and for many years now has been delivered by trainer Jodi Ranford. Now a regular to IPA communities, Jodi shares a strong rapport with rangers and always ensures that this critical training is tailored to scenarios likely to be encountered by our rangers or in remote communities.

BIDWERN BUTJ UNI

For years, Landowners, Elders, and community leaders from west and central Arnhem Land have envisioned an on Country, Aboriginal-owned adult learning organisation to support lifelong bi-cultural training and professional development for rangers and others in the caring for Country sector. In 2023, significant progress was made in this space, with a feasibility and business model study leading to the establishment of Bidwern Butj Uni – Bidwern meaning ‘many hands’ in Bininj Kunwok and Butj meaning ‘bush’ in Kriol.



Bidwern Butj Uni (BBU) is a community-led partnership between Karrkad Kanjdji Trust, Mimal Land Management and Warddeken Land Management, enabling on Country, Bininj-led education. In its inaugural year, the program has achieved remarkable success. The program structure includes Structured Training, Learning Camps, Work-Based Learning, and Skills Ambassadors.

A joint board meeting with Mimal Land Management in February 2024 co-designed the program’s guiding principles:

- Bininj-led
- On Country, culture
- Technology
- Accessible
- Both Ways learning
- On-the-job.

Steering committee and vision

In May 2024, the first steering committee meeting, hosted by Mimal Land Management, brought together representatives from Warddeken, Mimal, Nawarddeken Academy, and Learning on Country. The committee developed a vision for ‘Quality, bi-cultural learning to preserve and promote Bininj knowledge and culture’ and a mission ‘To create a strong, sustainable bi-cultural adult education through on Country learning that supports self-determination and empowers Bininj communities.’

Tailored training and leadership development

The BBU team works closely with ranger coordinators and rangers to ensure the training delivered is relevant to workplans and seasonal maps. This approach supports rangers in building the skills and confidence directly applicable to their on Country work. A focus on the development of leadership skills will be expanded in the coming years to support rangers in stepping up into leadership roles, further strengthening the program’s commitment to self-determination and empowerment.

BBU represents a significant step towards self-determination and empowerment for Bininj communities, offering culturally appropriate, on Country education that bridges traditional knowledge and modern skills. By aligning training with practical needs and fostering leadership, the program is creating a pathway for sustainable, Bininj-led land management practices that will benefit both the environment and communities for generations to come.

Bidwern Butj Uni facilitated mental health first aid training, delivered by experienced First Nations practitioners, for rangers and coordinators. This was the first time such training has been delivered in the IPA, and was a response to the mental health crises facing Indigenous communities.

29 accredited units delivered
 5 training partners engaged
 134 ranger enrolments
 13 Bininj Advisers involved
 6 units designed for developing ranger skills in rock art survey, maintenance and archiving with the Warddeken Bim team





Above far left and left Rangers participate in training facilitated by Bidwern Butj Uni.
 Below far left: The first Bidwern Butj Uni meeting hosted by Mimal.
 Above right: A joint Mimal and Warddeken board meeting was held, focusing on the Bidwern Butj Uni partnership.
 Below left: Women from Mamardawerre participate in mental health training, arranged by Bidwern Butj Uni.

CONFERENCES



Left: Representatives from ALFA travelled to Canberra to speak to politicians about the positive impact of carbon projects in Arnhem Land.

Below left: Chair Dean Yibarbuk on an expert panel discussing 'Fire, culture and ecology' at the 7th International Fire Behaviour and Fuels Conference.

Above right: Dean delivered a keynote address at the 7th International Fire Behaviour and Fuels Conference, at the invitation of the International Association of Wildland Fire.

Below right: Warddeken senior ranger Suzannah Nabalwad and Anthea Lawrence of Mimal at the First Nations Drone Conference in Cairns.



Our esteemed Chair Dean Yibarbuk was invited by the International Association of Wildland Fire to deliver a keynote address at the 7th Fire Behaviour and Fuels Conference. Entitled 'For Bininj, fire is everything', Dean's keynote was rooted in his personal experience as a fire practitioner, and supported by incontrovertible evidence of the success of Bininj fire management. Following his keynote, Dean was part of an expert panel discussion about 'Fire, culture and ecology'. Received with great interest, Dean's insights led to positive discussions with delegates, with many seeking deeper insights into Bininj practice and mindset. We're proud of you Bulanj – thank you for your tireless advocacy the Indigenous fire management movement.

Warddeken Chair Dean Yibarbuk travelled to Canberra with Otto Campion and Jen Ansell of Arnhem Land Fire Abatement (ALFA) Limited, meeting with Ministers, Advisors and Federal Government Departments to talk about the incredible environmental, social, cultural and economic outcomes for communities in Arnhem Land through engagement in the savanna fire management methods. Warddeken's pioneering participation in the West Arnhem Fire Abatement (WALFA) project, and the sale of carbon credit units, has generated funding for a range of projects fulfilling the long term vision of people on Country.

“We travelled to Cairns for the First Nations Drone Policy Workshop. We shared Warddeken and Mimal's story with the Digital Women Ranger Program over the last two years. We were proud to share our Digital Drone Badge as a first step for drone training on Country. We were also welcomed to Yarrabah by the Landowners and rangers. It was great to learn about how they are using drones to monitor sea Country, crocodiles and turtles. Before leaving we went to the aquarium and saw the biggest barramundi. We had good fun.”

– Suzannah Nabalwad and Anthea Lawrence

THE KARRKAD KANJDJI TRUST



Karrkad Kanjdji is the Kunwinjku name given to us by our founders, the Landowners 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) is a philanthropic trust established by the Traditional Owners of the Warddeken and Djelk Indigenous Protected Areas in 2010 to support their vision for a healthy Country. As custodians of much of West and Central Arnhem Land, these communities recognised the potential strength, flexibility, and freedom provided by alternative funding sources. Today, KKT serves as a shared resource for eight different First Nations-owned organisations across Arnhem Land, supporting the management and conservation of over 65,000 square kilometres of land and sea Country.

This year marked a significant milestone—ten years since KKT first began project-based funding. This achievement is a testament to the dedication and resilience of everyone involved, particularly Warddeken, whose leadership was instrumental in establishing KKT and whose representatives continue to guide the organisation's decision-making at a board level.

Reflecting on the past 12 months, we are struck by Warddeken's leadership within the region and what this has facilitated for other First Nations land management groups, organisations, and communities. Warddeken established the Nawardeken Academy, a model which is now supporting the Homeland School Company, an organisation that similarly

develops community-owned bicultural schools across remote homelands in the Djelk IPA. In partnership with Mimal Land Management Aboriginal Corporation, Warddeken's collaborative work has also helped launch the region's first on Country, adult education and training initiative: the Bidwern Butj Uni.

Thanks to the generosity and commitment of our supporters, philanthropists, foundations and corporates, KKT granted over \$3 million to Warddeken and Nawardeken Academy in 2023-24. We are proud to support crucial programs spanning conservation, cultural heritage management, bi-cultural education, fire, and monitoring and evaluation.

As KKT Co-Chair and Warddeken Chair Dean Yibarbuk states, this year "we have been moving forward, getting things done". However, we know there remains an extensive need for greater support, particularly given the immense scale of Warddeken's and others' land management efforts. KKT is fortunate to benefit from the expert guidance of our majority Bininj board, supported by Balanda directors, who are dedicated to this work. Together with a small but passionate team, KKT is committed to connecting this critical work with sustainable, best-practice philanthropic funding.

It is a privilege to work together with Warddeken. For more information or to donate to their critical work, please contact the Karrkad Kanjdji Trust at mail@kkt.org.au or via kkt.org.au

OUR PARTNERS

Thanks to our many supporters and partners



EXTRACT FROM FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2024

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 entity), which comprises the statement of financial position as at 30 June 2024, the 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 has been prepared in accordance with requirements of the Corporations Act 2001 and Division 60 of the Australian Charities and Not-for-profits Commission Act 2012 (ACNC Act), including:

- (a) giving a true and fair view of the entity's financial position as at 30 June 2024, and of its financial performance and its cash flows for the year then ended; and
- (b) complying with the Corporations Regulations 2001; and
- (c) complying with Australian Accounting Standards, and Division 60 of 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 entity in accordance with the Corporations Act 2001, the ACNC Act and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (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 confirm that the independence declaration required by the Corporations Act 2001, which has been given to the Board of Directors of the entity, would be in the same terms if given to the Board of Directors as at the time of this auditor's report.

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

Responsibilities of Management and The Board of Directors for the Financial Report

Management is responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards, the ACNC Act 2012 and the Corporations Act 2001. The responsibility of Management also includes such internal control as management determines is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error.

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

The Board of Directors are responsible for overseeing the entity's financial reporting process.

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 Australian Auditing Standards, we exercise professional judgment 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 entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's 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 entity'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 entity 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 Board of Directors 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.

Report on Other Legal and Regulatory Requirements

In our opinion, the entity has complied with 60-30(3)(b), (c) and (d) of the ACNC Act:

- (a) by providing us with all information, explanation and assistance necessary for the conduct of the audit;
- (b) by keeping financial records sufficient to enable a financial report to be prepared and audited; and
- (c) by keeping other records required by Part 3-2 of the *ACNC Act*, including those records required by Section 50-5 that correctly record its operations, so as to enable any recognised assessment activity to be carried out in relation to the entity.



Chassey Davids, CA, RCA, AMIIA, BCom

Registered Company Auditor number: 490152

Director

Australian Audit

Perth, Western Australia

Date: 23 September 2024

Statement of Profit or Loss and Other Comprehensive Income

	2024 \$	2023 \$
Revenue	8,560,179	7,243,759
Accounting and audit	159,078	136,775
Administration and project support	279,392	122,467
Bad and doubtful debts	(2,612)	10,157
Communications and IT	114,467	144,562
Consulting and legal fees	415,608	155,162
Depreciation and amortisation	369,467	338,509
Directors' fees	52,113	26,625
Employee expenses	3,588,890	2,914,554
Helicopter hire and avgas	1,188,750	1,043,003
Lease interest expense	7,634	6,743
Operational	503,057	579,510
Other	35,019	37,802
Repairs and maintenance	128,424	138,637
Training	52,458	53,620
Travel	473,314	459,639
Vehicle expenses	522,858	465,075
Surplus/(deficit) for the year	672,263	610,919
Other comprehensive income	-	-
Total comprehensive income	672,263	610,919

Statement of Financial Position

	2024 \$	2023 \$
ASSETS		
<i>Current assets</i>		
Cash and cash equivalents	3,413,347	2,760,767
Trade and other receivables	208,012	20,054
Other assets	138,735	140,406
Total current assets	3,760,094	2,921,227
<i>Non-current assets</i>		
Property, plant and equipment	2,154,312	2,096,877
Right of use assets	137,001	161,705
Total non-current assets	2,291,313	2,258,582
Total assets	6,051,408	5,179,808
LIABILITIES		
<i>Current liabilities</i>		
Trade and other payables	655,560	546,652
Lease liabilities	52,179	55,330
Contract liabilities	1,035,023	892,198
Employee benefits	179,424	221,784
Total current liabilities	1,922,185	1,715,964
<i>Non-current liabilities</i>		
Lease liabilities	86,698	104,130
Employee benefits	42,918	32,371
Total non-current liabilities	129,616	136,501
Total liabilities	2,051,801	1,852,465
Net assets	3,999,607	3,327,344
EQUITY		
Accumulated surplus	3,999,607	3,327,344
Total equity	3,999,607	3,327,344

IN REMEMBRANCE OF OUR VISIONARY LEADER

BARDAYAL LOFTY NADJAMERREK AO 1926–2009



Yakkake Wamud Namok, djorrhbayeng, 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 ngarridjالبengkan ngudda.
We shall forever think about you.

Kunmalng ke karrurndeng 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”.



Tinnesha and Alexandria joined Warddeken at the same time, after working hard to graduate from Gunbalanya School. Though still young, these two incredible daluk now have almost a decade's experience as rangers, working alongside each other across every Warddeken work program and activity. They are the future of Warddeken. © Kane Chenoweth

Back cover: Professor Berribob Dangbungala Watson is the master bush craftsman of the Warddeken IPA. Berribob has lived his entire life in the Kuwarddewardde, and is revered across the IPA and beyond for his skill, wisdom and gentle nature.



“IN THE 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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