

# WARDDEKEN LAND MANAGEMENT LIMITED



ANNUAL REPORT  
2014-2015

## Warddeken Land Management Limited Annual Report 2014–2015

This annual report was compiled for Warddeken Land Management Limited by Georgia Vallance. Layout and design by Georgia Vallance and Jennifer Ansell.

Unless otherwise stated, photographs are by Warddeken Land Management Limited. We thank David Hancock at Skyscans, Peter Cooke, Alys Stevens, Rowand Taylor, Ian Morris, Teigan Cremona, Bjorn Everts and Dominic O'Brien for permission to use their images.

Special thanks to the Nadjamerrek family for permission to use images of Wamud Namok and his country.

Warddeken wishes to thank Alys Stevens, Dr. Murray Garde and Peter Cooke for their contribution to this Annual Report.



The sprayed hand stencil symbol at the centre of the Warddeken logo is known as bidbimyo, in Bininj Kunwok. It was created in 2007 with the incorporation of Warddeken as a not for profit company limited by guarantee and replaced an earlier logo for the unincorporated, fire-focused Manwurrk Rangers. The bidbimyo design is the hand of Warddeken's founder and patron, Bardayal Lofty Nadjamerrek AO (Wamud Namok, 1926–2009). The symbol reminds us that it is his guiding hand that led the land management movement in western Arnhem Land.

His vision leads us into the future.

### Photos

Facing page: Berribob Dangbungala Watson at Enamaraway. Photo by David Hancock at Skyscans.

Cover page: Bernard Garnarradj conducting early dry season on-ground burning. Photo by David Hancock at Skyscans.





*Our vision is to have our healthy people living and working on our healthy country in the Arnhem Plateau.*

*We want the management of our land to be in our hands now, and into the future.*



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### Photos

This page: Biodiversity Survey at Ngangkan. Photo by Michael LawrenceTaylor

Facing page (top to bottom): Arijay Camp and Gavin Phillips screwing down the deck for the new school balabbala; Keenan Nayinggul in the Kabulwarnamy workshop; Ray Nadjamerrek, Eliza Nawirridj with their son Richard; Natasha Yibarbuk being painted in preparation for a kunborrk (dance). Photos by David Hancock at Skyscans, Georgia Vallance and Jake Weigl.



# Warddeken story

Warddeken Land Management Limited (WLML) is a company established by Nawarddeken, people of the western Arnhem Land plateau in Australia's Northern Territory, to assist them with managing their land and its natural and cultural resources.

Warddeken grew out of the outstation movement — the return of the bininj landowner diaspora to traditional estates. This movement began in the 1970s and reversed a demographic shift of the past 100 years during which many families left the plateau for the trade goods and excitement of the frontier at buffalo camps, small mines, pastoral operations, missions and government settlements. Many married into lowland clans and settled more permanently in places far from home, leaving only a small number of families still living on the plateau by the end of World War II.

The most significant movement of western Arnhem Land was an exodus from the mission at Kunbarlanja, spurred in part by a desire to escape the influence of alcohol from the west and protect country and sacred sites from European occupation. The movement proceeded with building first one outstation and airstrip and then another as they moved steadily eastward towards the Mann and Liverpool Rivers.

By the new millennium, outstations clustered around much of the rugged interior of the plateau. In 2002 the venerable Bardayal Lofty Nadjamerrek returned to his childhood home at Kabulwarnamyo and from there he worked to achieve his vision of a larger return to country and a return of effective Aboriginal land management — healthy people living on healthy country.

In 2008, WLML was formally registered as a not-for-profit public company, limited by guarantee. In 2009 the Warddeken Indigenous Protected Area (IPA) was declared. The IPA covers 1,394,951 hectares of spectacular stone and gorge country on the Western Arnhem Land Plateau. Comprising the estates of 40 clan groups, the IPA is globally significant for its natural and cultural values.

Today, Warddeken is an innovative Indigenous organisation tasked with coordinating the management of the IPA and building Indigenous management capacity.





## Board of directors

Warddeken Land Management Limited is governed by 12 Indigenous directors elected every three years. Three members are elected for each of four wards or membership classes, defined by geographical groupings of clans—kakbi (north), karrikad (west), walem (south) and koyek (east). At 30 June 2015 representatives were:

**Kakbi:** Kevin Bulliwana, Victor GarlNgarr, Conrad Marlangurra  
 Warddjak (Maburrinj), Danek (Kudjumarndi), Ngalingbali (Kudjekbinj), Yurlhmanj (Djalbangurrk), Madjuwarr (Kunukdi), Marrirn (Kumarrirnbang), Wurrik (Mandedjkadjang), Mayirrkulidj (Djurlka), Durlmangkarr (Kudjaborrng/Kunburray), Djok (Ngolwarr), Barrbinj (Kumarrirnbang/ Kudjaldordo).

**Karrikad:** Jessie Alderson, Fred Hunter, Kenneth Mangiru  
 Manilakarr Urningangk (Mikkinj), Maddalk (Kumalabukka), Warddjak/Worrrkorl (Balmana from Kundjikurdubuk), Bolmo (Dedjrungi and Dordokiyu), Badmardi (Balawurru, [succession/caretaking]), Wurnkomku (Nawoberr).

**Walem:** Christopher Ngabuy, Isaiah Nagurrurrba, Lachlan Jumbirri  
 Djorrorlom (Bamo), Murruba (Morre), Karnbirr (Djohmi), Mimbilawuy (KarlNgarr), Barabba (Mimbrung), Mandjuwarlwarl (Bobbolinjmarr), Barradj (Yanjkobarnem), Bulumo (Makkebowan).

**Koyek:** Terrah Guymala, Sarah Nabarlambarl Billis, Lois Nadjamerrek  
 Bordoh (Ngorlkwarre), Mok/Berdberd (Ankung Djang/ Ngalkombarli), Yamarr (Kidbulmaniyimarra), Kulmarru (Kubumi), Bolmo (Marlkawo), Rol (Bolkngok), Djordi/Djorrorlom (Kodwalewale), Buluwunwun (Walangandjang), Wurrbbarn (Nabrang), Warridjngu (Boburrk), Yamarr (Kidbulmaniyimarra).









## Chairman's report Fred Hunter

This year as ever Warddeken has performed strongly both as a company and in all aspects of our work program managing the Warddeken Indigenous Protected Area.

One of the highlights has been working with the Karrkad-Kanjdi Trust to develop an education project, which in later 2015 will see Warddeken establish a small school at Kabulwarnamy, our operational headquarters. This is an ambitious but necessary project if we are to succeed in our vision of bringing our people back to country, ensure the ongoing preservation of our culture and provide future generations with the education opportunities they deserve.

In the coming year Warddeken will release a new Plan of Management, which will guide the next five years' work for the company. There are many exciting initiatives in the plan, all of which are based on the feedback of our members from across the IPA.

I wish to thank my fellow board members for governing Warddeken with passion and integrity, CEO Shaun Ansell for leading our company in the right direction, and each and every staff member of Warddeken, bininj and balanda, for the dedication and commitment they show on a daily basis. By working together we have again shown Warddeken to be a leader in the field.

That we are at the forefront of the Indigenous land management movement was recognised in this year's NAIDOC Awards, with our company taking out national honours in the Caring for Country category. I attended the ceremony in Adelaide and proudly accepted the award on behalf of our company. I dedicated it to my brother, the late Bardayal Lofty Nadjamerrek, who gave me so much personally and without whom our company would not exist.

Lofty's spirit lives on in all of us as we continue to look after the Kuwarddewardde.





## Warddeken CEO Shaun Ansell

This past year has seen Warddeken continue to strive and succeed in an ever challenging environment. Notably Warddeken has continued to grow and expand our operations through private means, in particular through our partnership with the Karrkad-Kanjdi Trust (KKT) and the Arnhem Land Fire Abatement (NT) Ltd company (ALFA).

Through our partnership with ALFA and KKT Warddeken have generated and leveraged significant capital through the sale of carbon credits to fund the establishment of an independent school at Kabulwarnamyo. This exciting venture will fulfil the dreams of many Nawarddeken to take charge of education and to deliver it on country. This project will be the first of many such partnerships between Warddeken and Karrkad-Kanjdi and will pave the way for the continued growth and success of Nawarddeken.

Our continuing partnerships with the Australian Government, Bush Heritage and Darwin LNG have again underpinned the strong successes achieved by our program this year.

The successes of 2014–2015 would not have been possible without the continued hard work, innovation and brilliance of our dedicated staff, members, directors and chairman, Fred Hunter. I would like to thank all of them, Bininj and Balanda alike, for working so hard to improve the health of the Kuwarddewardde and the lives of Nawarddeken.

Photos

This page: Nigel Gellar, Shaun Ansell and Dean Yibarbuk in Namibia at an international fire knowledge exchange.

Facing page: Fred Hunter at Kabulwarnamyo.

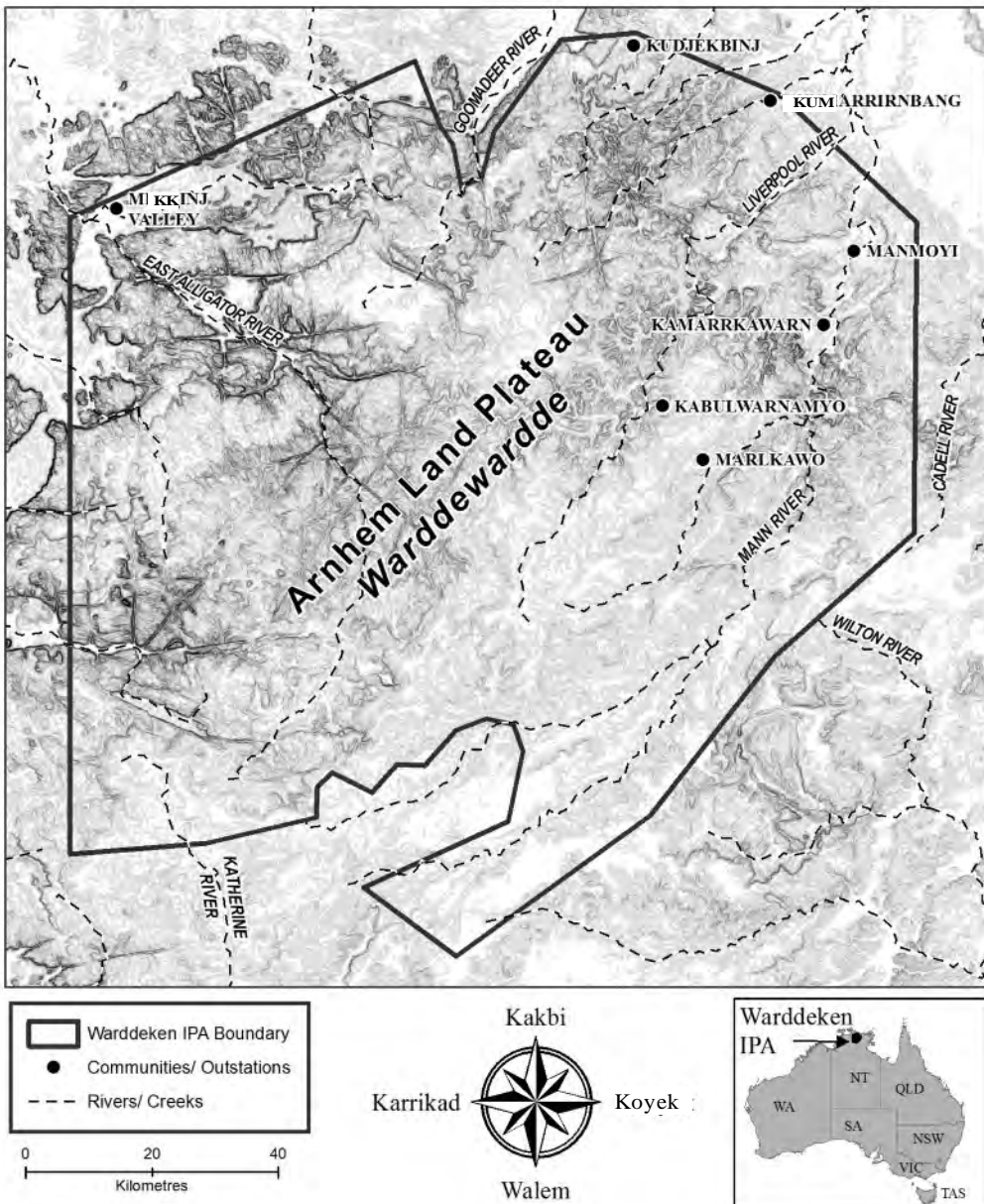
Previous page: Board of directors in Kunbarlanya - (clockwise from top left) Isaiah Nagurrurrba, Dean Yibarbuk (Governance mentor), Fred Hunter, Mandy Muir (proxy for Jessie Alderson), Terrah Guymala, Victor GarIngarr, Kenneth Mangiru, Christopher Ngabuy, Jamie Billis (proxy for Sarah Nabarlambarl Billis. Inset (top to bottom): Kevin Bulliwana, Lois Nadjamerrek, Lachlan Jumbirri, Conrad Marlangurra.

Previous page: Djabidj bakoluy on Mok clan estate, one of the many resting places of ngalyod the rainbow serpent. Photo by Rowand Taylor.

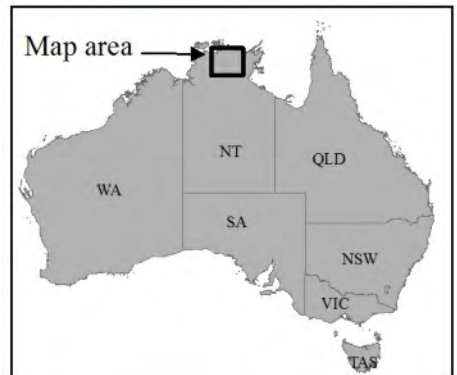
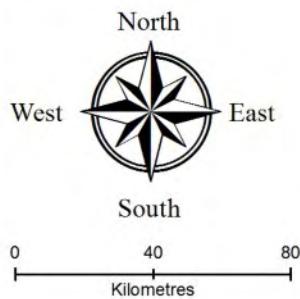
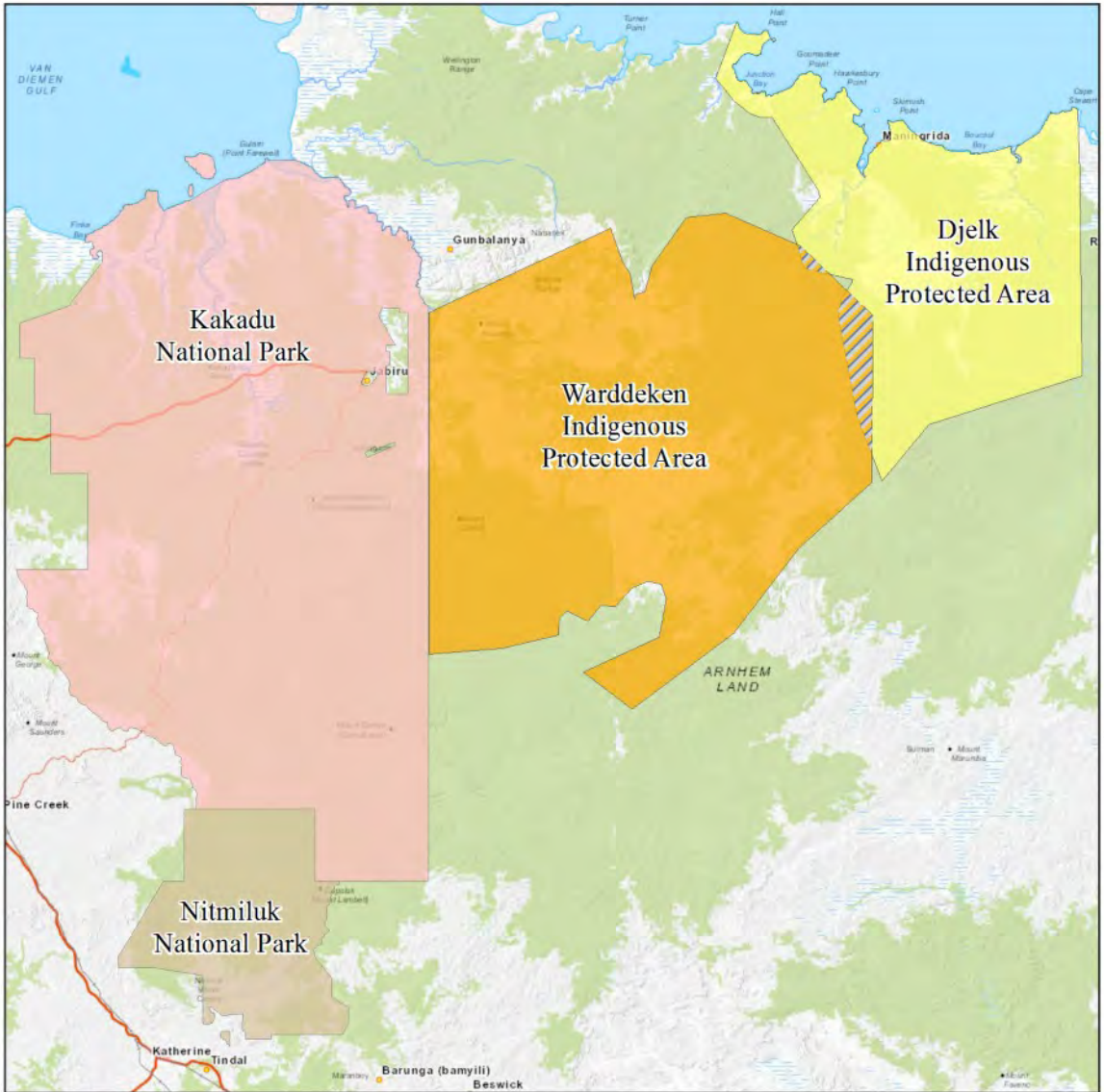
# The Warddeken IPA

The Warddeken Indigenous Protected Area is located in western Arnhem Land in the Northern Territory of Australia and encompasses seven outstation communities: Kabulwarnamyo, Manmoyi, Mikkinj Valley, Kamarrkawarn, Markkwo, Kumarrirrbang and Kudjekbinj.

The Warddeken IPA borders Kakadu National Park to the west and overlaps part of the Djelk IPA to the north east. The area is home to dozens of endemic plants, a host of threatened species and a newly identified and unique threatened ecological community—the Arnhem Plateau Sandstone Shrublands Complex.









## Benefits of Warddeken’s ranger program

Since incorporation in 2008, Warddeken has grown from a small team of CDEP (Community Development and Employment Projects) supported rangers to employing over 120 people each financial year in varying capacities.

Warddeken is one of only a handful of organisations in the country offering employment for Indigenous people living on homelands in remote Australia. As such, Warddeken is integrally linked to livelihoods on country, empowering Indigenous landowners to manage their country in accordance with their priorities to deliver social, economic and cultural benefits for their people.

Warddeken has proved over eight years of operation, that investing in supporting Indigenous people to work and live on their country works. Not only are the rich natural and cultural assets of this unique landscape maintained but people and communities engaged in our programs experience significant positive changes in their own health and wellbeing. Ranger programs such as Warddeken’s are economically transformative, reducing welfare dependence and supporting innovation and the development of real remote economies.

The work of Warddeken has been generously supported by the federal government through the Working on Country and Indigenous Protected Area programs since 2009. With funding for both these programs due to expire in 2018 and at the time of writing no commitment to fund them beyond this, we hope that the government will maintain and build upon these programs, which creatively deliver real futures for Indigenous people.





## NAIDOC award

*"I dedicate this award to our Old People; those we have lost and those still with us. For the wisdom, strength and passion they have handed down to younger generations of Bininj."* Fred Hunter

Elders, rangers and members of Warddeken received the 2015 national NAIDOC award in the Caring for Country category. The award recognises the commitment of Warddeken in protecting the culture and country of the Kuwarddewardde (West Arnhem Plateau) through customary and contemporary management practices.

Warddeken were nominated by longtime partners Bush Heritage Australia, and received the award at the NAIDOC ball and awards ceremony in Adelaide. Chairman Fred Hunter and IPA Coordinator Georgia Vallance traveled to South Australia to accept the award.

Fred dedicated the win to Nawarddeken 'Old People' who have cared for and protected the stone country for generations, and in particular to his late brother Bardayal Lofty Nadjamerrek, the founder and leader of Warddeken.

This award adds to the national recognition of the strength of Warddeken's programs. In 2011, Warddeken won the Caring for Country Indigenous Banksia Award and in 2013 the Eureka Prize for Innovative Solutions to Climate Change.

### Photos

This page: Georgia Vallance and Fred Hunter accept the NAIDOC award in Adelaide. Mary Kalkiwarra Nadjamerrek and her great granddaughters Jemimah and Regina.

Previous page: Warddeken rangers walk to check traps on the biodiversity survey at Yidngarremarneng.



## Fire management

Warddeken's fire management program this past year was marked by some practical challenges and amazing successes.

The late dry season of 2014 was intense and Warddeken Rangers had to work very hard to contain a number of significant wildfires, stretching resources and testing the limits of our staff. Through their efforts over more than 3000 hours of hard work, all four major wildfires were successfully contained. This effort contributed to a better than expected emissions abatement from the WALFA project for the 2014 calendar year where difficult dry season weather conditions hampered efforts for all groups.

Whilst fire-fighting is tough work, our rangers appreciate the time spent in different estates, often far from roads or outstations giving them an opportunity to rediscover country. During this year's late fire season the Warddeken rangers were particularly taken by the kuwarddebim (rock art) of the Marrin estate near Kumarrinbang and later traveled back there with landowners to record and document this significant bim.

In the early dry season of 2015, Warddeken's burning program incorporated a range of activities: cultural and environmental asset protective burns, bushwalks, cultural camps and traditional knowledge activities, infrastructure protection and aerial prescribed burning (APB). Our holistic approach aims to keep customary knowledge at the front and centre of the program at all times with a total of 57 rangers working with three senior cultural advisors engaged in our early season fire management programs during 2015.

### Photos

This page: Greg Lippo conducts on ground burning from the back of a Landcruiser under the direction of Keith Nadjamerrek. Photo by David Hancock at Skyscans.

Previous page: Zacharia Namarnyilk fine-scale burning at a rock art site. Photo by David Hancock at Skyscans.





The on-ground burning program was a major focus, with Manmoyi and Kamarrkawarn rangers in particular undertaking a number of day walks as well as a five-day 70 km bush walk from Rarrekbaldeng to Markawo, burning country along the way. Of particular importance during our on-ground activities was the protective burning for cultural assets such as rock art and Anbinik, with more sites being actively managed in 2015 than any previous year.

During 2014–2015 year, the WALFA partners finally realised their goals of using ALFA (NT) Ltd to bring the WALFA project into the Australian carbon market enabling the sale of ‘excess’ Australian Carbon Credit Units (ACCUs) produced from the WALFA project.

The establishment of ALFA was the result of the hard work of six ranger groups Djelk, Adjumarlarl, Mimal, Arafura Swamp Rangers Aboriginal Corporation, Jawoyn and Warddeken and was supported by the Australian Government, Northern Land Council and ConocoPhillips. This independent, not-for-profit, Bininj owned company is now the interface between these groups and the national carbon market. In 2014–2015 this was a resounding success with the sale of more than 500,000 carbon credits during the period. The funds generated from this represent what is probably the single largest injection of private capital into indigenous land management in Australia to date, with all of the funds to be distributed to the participating ranger groups and reinvested in land management activities. We are all immensely proud of the massive success of this venture and the role which Warddeken and our neighbouring ranger groups have played in making it a reality.

It is important to recognise the ongoing and staunch support of our many partners, as none of this would have been possible without the generous support of ConocoPhillips, DLNG, the Northern Territory Government, the Darwin Centre for Bushfire Research and the Northern Land Council.



## Walking the Kuwarddewardde

*"For our young people it's all about being on country, walking the paths of the Old People and learning how to talk to the spirits and ancestors who dwell there. This is the way to develop a good feeling for country and it's this feeling for our land that makes us strong in our cultural identity"* Dean Yibarbuk

### **Kururrkkurduk to Bibidoy**

Helping wurdurd (children) cultivate a strong feeling for country is central to Warddeken's vision and future. In the 2015 dry season school holidays a group of 40 landowners including 25 children, followed a bininj manbolh (traditional walking route) from Kururrkkurduk on Mok clan estate to Bibidoy in Durlmangka clan estate. Professor Mary Kalkiwarra Nadjamerrek, who grew up camping and walking the region, taught children about the place names, clan associations and ancestral creation beings of the area. Landowners and rangers then shared knowledge around harvesting and preparing various parts of waterlilies, which grow in abundance at Bibidoy, and the children put this knowledge into practice by collecting and preparing the plant. For many children it was the first time they had eaten water lilies and everyone agreed the corms, which were peeled and roasted, were the tastiest part.

### **Rarrekbaldeng to Marlkawo**

Over six days in June, sixteen rangers and their families undertook a 70 km walk from Rarrekbaldeng on Djordi clan estate to Marlkawo community on Bolmo clan estate. This walk focused on undertaking fine-scale burning, with strategic patchy burning practiced for the duration of the walk. Importantly, young people and children were encouraged to participate in burning activities. Engaging younger generations equips them with confidence and expertise and rangers identified a need to teach practical skills to children in an immersive environment.







## Biodiversity surveys

Biodiversity surveys undertaken in and around patches of the endemic rainforest tree anbinik (*Allosyncarpia ternata*), have given reason to be cautiously hopeful about the persistence of populations of small mammal species within pockets of the Arnhem plateau.

The choice of anbinik rainforest patches for the survey represented the first comprehensive biodiversity surveys within this ecosystem. In September 2014, eight sites were surveyed in two different areas of the IPA, near the Warddeken-Kakadu boundary in the East Alligator region (a region of the IPA which was data deficient) and the other at Yidngarremarneng, an hour's drive from Kabulwarnamyo ranger base. Six rangers worked alongside staff from the NT Government Flora and Fauna division to implement a range a standard trapping techniques, with teams running four sites in each area.

At each site, standard live trapping methods for small mammals and reptiles were run for 4 nights, and remote cameras were deployed at these sites using the 5-camera-array method pioneered by the Warddeken and Djelk IPAs. Motion sensor cameras were in place for almost four months, and were collected in January 2015.

Eighteen animals were captured or sited during the live trapping. Of these there were six mammals and 12 reptiles. Signs of the near-threatened yok (northern brown bandicoot, *Isodon macrourus*) were observed.

Thirty animals were recorded on cameras. Of these there were 14 mammals, 12 birds and 4 reptiles. The northern brown bandicoot and common brushtail possum were recorded for the first time on camera in the Warddeken IPA, showing the usefulness of this survey tool.







Populations of the common rock rat and the Vulnerable (NT) Arnhem rock rat were also recorded. Other exciting finds included the elusive twilight monitor (*Varanus glebopalma*) and charismatic frilled neck lizard (*Chlamydosaurus kingii*), indicating cameras are potentially useful for detecting large reptiles, particularly in rocky environments with stable back-ground temperatures. Introduced pests feral cats, buffalo, pigs and black rat were observed.

The survey provided important data for biodiversity monitoring, however the findings also have broader implications, which will inform the ongoing management of the IPA. Results demonstrate that anbinik forests, and in particular the gorge country in which it commonly occurs, provide important places for species of indigenous and non-indigenous concern. The work that Warddeken is doing to protect these patches is thus protecting key species. The survey results confirm that cameras are effective tools for detecting small-medium mammal species. The combined live-trap and camera data is contributing to a larger NT-wide data set using these dual methods, and will aid in determining how many, and for how long cameras are required for detecting the presence of key species (including non-natives such as feral cats and black rats). In turn, the species patterns will help to understand the impact of ecological drivers such as feral animals and fire.

The protection of anbinik ecosystems as habitats for the unique fauna of the stone country is a key management priority for the IPA. Rangers have worked tirelessly over the previous four years to actively manage fourteen anbinik sites through the manual installation of mineral earth breaks and subsequent protective burning. This work was initiated primarily because landowners saw intrinsic value in the protection of stands of the ancient tree, which one late Professor described as ‘the tree from the very beginning’.

#### Photos

This page: Anbinik isolate forest. Photo by David Hancock at Skyscans.

Facing page: Animals caught on camera from top to bottom - brushtail possum; echidna; agile wallaby; *Varanus gouldii*.  
Previous page (Walking the Kuwarddewardde): Lindsay Whitehurst and his younger brother Alex Phillips participating in the Rarrekaldeng walk; Stuart Guymala fine scale burning during a bushwalk; Tysaac Namarnyilk collecting mandem; Tahlia Namarnyilk and Elaine Brown; a camp site on the Mann River.



## Bamkarnamalkmalk - Spinifex Pigeon

A major highlight of the anbinik biodiversity survey was the recording of a Spinifex Pigeon (*Geophaps plumifera*). In itself this is interesting, as this record is much further north than the usual range. The record is even more special however as it provides the missing piece to a puzzle from many years ago, in an intricate marriage of customary knowledge and contemporary conservation.

Our late, great leader Bardayal Lofty Nadjamerrek had comprehensively described this species of pigeon and its habitat to linguist Dr Murray Garde as '*bamkarnamalkmalk*'. At that time, it was filed as an undescribed species as it aligned with nothing within predicted range

Now, many years later, the use of camera traps has revealed the western scientific classification of this species.

Bamkarnamalkmalk were observed in the 1980's in Kakadu National Park by ecologist Kym Brennan, who says as the species is not migratory it is likely there is a small population established along the East Alligator River system.

Unparalleled amongst his generation in ecological knowledge, it seems that even now, seven years after his passing, Bardayal still has lessons to teach us about the Kuwarddewardde and how we must look after it.

### Bamkarnamalkmalk

Race of pigeon which lives in rocky habitats.

*Rakul kukbuyika, kuwardde karri wanjh bamkarnamalkmalk, warddeken kudjambudda, djilinkuyeng kodjmudno nawu.*

The ordinary partridge pigeon is different. The rock partridge pigeon lives in the rock country; it's a rock dweller on the flat rocky platforms and has a longer crest, the feather on its head.

Bardayal Lofty Nadjamerrek, 2006





## Feral cats: four-year project complete

Cats have been implicated in the decline of a suite of small mammal species across northern Australia and since the declaration of the IPA in 2009, Nawarddeken landowners have become increasingly concerned about mammal decline and the role of predation by feral cats.

Between 2012 and 2015 Warddeken rangers worked collaboratively with scientists Alys Stevens and Terry Mahney from the Northern Territory Government's Flora and Fauna Division to design and undertake a research project to gain better understanding of the role of feral cats in mammal decline across north Australia and trial methods for their control. The project was undertaken with a culturally driven, and two-tool box approach, as per the requirements of the NTG IPA Scientist shared between the Warddeken and Djelk IPAs. The project was supported by the National Environmental Research Program (NERP).

Prior to this project, knowledge of cats in northern Australia, and particularly Arnhem Land, was very limited. It emerged that rangers from the Manmoyi and Kamarrkawarn ranger bases were particularly interested in working with scientists to develop and share skills and knowledge researching cat ecology, impacts on mammals, and control measures.

The major highlights of this four-year project can be summarized under the three main project goals:

### Photos

This page: Casten Guymala, Jarris Wurrkidj, Ackim Naborlhborlh and Jake Burrunali with a trapped feral cat.  
Previous page: Bardayal Lofty Nadjamerrek and Dr Murray Garde record ecological information in Bininj Kunwok in the early days of Kabulwarnamyo community; The spectacular bamkarnamalkmalk. Photo by Ian Morris.



## **Trial and develop methods for surveying and monitoring feral cat distribution and occurrence**

### *Camera traps*

Through a series of trials, a method of detecting cats using an array of five-cameras was developed. This was a breakthrough, as methods suitable in southern states were found to be ineffective in the Top End. The method has been adopted and further developed by the Northern Territory Government, to become a standard part of all biodiversity survey and monitoring programs. Landowner perceptions of feral cat presence were validated; cats were found to be widespread in the area with approximately 52 +/- 9 % of the country being occupied by cats at the point of survey.

### *Bokno Manborlh – Estimating cat occupancy using ‘track transects’*

Concurrent with the camera trap trials, tracking was explored to build on the reports rangers were making about seeing cat tracks as they worked through the country. A focus was put on naturally occurring transects, exploiting the ample sandy drainage lines that crisscross the plateau. The project utilised knowledge of country and the well developed observational skills of rangers, recording 234 cat tracks over 313 km.

## **Improve understanding of feral cat ecology**

Two cats were fitted with GPS collars with the assistance from AWC staff and their two cat-detecting dogs (<http://www.australianwildlife.org>). Collars were left on for 12 weeks, with data downloaded remotely every 3-4 weeks. The GPS data revealed home-range estimates of 1563 and 2326 ha. These are much larger than home-ranges measured concurrently in the Kimberley (average 760 ha), and represent some of the largest home-range sizes ever found for cats in Australia.

Six feral cats were analysed for stomach contents from the study area. Cats had eaten at least 4 species of mammals (including two sugar gliders and one grassland melomys), five lizards, three birds and eleven insects. This data, pooled with data from across the Top End suggests, as with studies from elsewhere in Australia, a diversity of small vertebrates, dominated by mammals, make up the bulk of the diet.



## Trial techniques to manage cats

Rangers used spotlights over 400 km of road network over 4 weeks and approximately 85 hours. Rangers observed nine cats during the culling patrol trial but were unsuccessful at culling any of them.

The rock country proved difficult to access with cats able to avoid being shot. Capturing attempts with the assistance of AWC dogs demonstrated the difficulties of locating cats in this remote and rugged landscape.

Trapping of cats was trialled with cage traps and bag traps. Bag traps (Fabric Animal Traps, fabricanimaltraps.com.au) are a hinged jaw-type trap with synthetic 'wool bale' material stretched around the jaws and opening into a bag behind, a trip mechanism is hidden under the floor of the trap. Success in trapping feral cats had previously been achieved in Tasmania. The live-trapping trial resulted in the capture of only one juvenile cat.

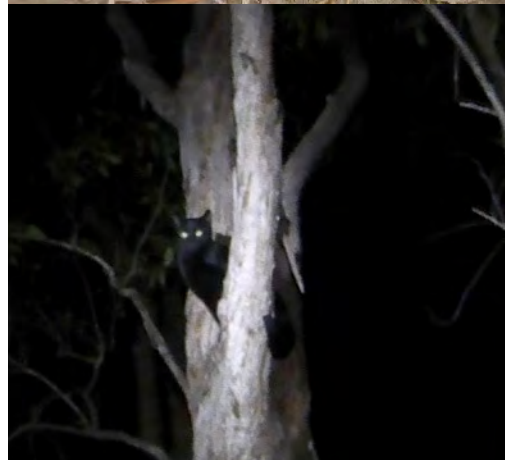
Camera-traps set on the traps over four weeks detected no other cats. This suggests that cats are difficult to trap and low cat visitation rates indicate trapping may have limited effectiveness in this region.

The project made a number of breakthrough findings, thanks to the trial and error worked through collaboratively by landowners and scientists. The unsuccessful direct culling trials were important learning experiences, highlighting the necessity of managing the other threats to small mammals that can be more directly influenced, such as hot fires, weeds and feral herbivores. Now that methods for detecting cats and small mammals have finally been developed, action-research looking at the direct impacts of threat management on these target species is an exciting reality for future collaborations.

Further information:

A guide for the use of remote cameras for wildlife survey in northern Australia.

[http://www.territorynrm.org.au/wp-content/uploads/2013/06/5.2\\_a\\_guide\\_to\\_use\\_of\\_remote\\_cameras\\_for\\_wildlife\\_surveys\\_final\\_web.pdf](http://www.territorynrm.org.au/wp-content/uploads/2013/06/5.2_a_guide_to_use_of_remote_cameras_for_wildlife_surveys_final_web.pdf)





## Wardbukkarra traditional knowledge film

A number of Warddeken rangers from Manmoyi ranger base are also members of the talented and successful stone country rock band Nabarlek who write and perform songs about culture and country in Kunwinjku and English. They are represented by the record label Skinnyfish. In June 2015, Warddeken worked in collaboration with Skinnyfish to support the filming of a traditional knowledge film called Wardbukkarra, funded by Screen Australia and part of the Songlines on Screen project. The film is named after malevolent, flesh-eating mythological spirits that have no clan name and particularly enjoy the flesh of human cheeks.

Wardbukkarra is set in the dreamtime and tells the story of how the first ancestors of Nawarddeken, nayuyunghi, fought off the cannibalistic narmande and in doing so learned the first songs and dances of the Kuwarddewardde.

To support film production, rangers worked for months in the lead up to produce items of specialist material culture, including stone axes, spears, spear throwers, grass skirts, dilly bags and floor mats. Rangers also constructed the set for the film, building a number of traditional kodbarre shelters on the banks of the Mann River. Throughout filming rangers supported the camp logistically and eighteen rangers were involved in the film as actors along with a number of children.

The script development process involved rangers liaising with elders to ensure the story was told accurately and shot in the right location. Building the set and preparing props was coordinated by Warddeken's ongoing material culture project led by Berribob Dangbungala Watson and Elizabeth Nabarlambarl.

Filming took place over two weeks at various sites along the Mann River and provided an incredible opportunity for Manmoyi community residents young and old to become familiar with the specifics of a mythology story within their clan estate.

















## Culture camps

Reconnecting people with their country is at the heart of Warddeken’s work program. Each dry season, hundreds of Nawarddeken return to the stone country to take part in long distance cross country walks along ancient trading routes and attend cultural camps where language, history and customary lore is transmitted to the younger generations.

These activities keep Nawarddeken healthy and connected to their rich heritage, using and valuing the knowledge of the elders for the benefit of the next generations.

This dry season three cultural camps were held - at Marlkawo Creek on Bolmo clan estate, Kulguki on Mok clan estate and Rarrekaldeng on Djordi clan estate. Two bushwalks were undertaken – one long distance walk over six days and another day walk involving children and elders. Over two hundred Nawarddeken with connections to the IPA were involved in the program of camping and walking on country.

### Photos

This page: Warddeken rangers and Children’s Ground visitors join together for a large kunborrk (dance) at Marlkawo camp.

Facing page: Mary Kalkiwarra Nadjamerrek teaches Natasha Yibarbuk and Jemimah Djogiba about the correct way to harvest water lily corms. Photo by Georgia Vallance; Image captured during filming of Wardbukarra. Photo by Skinnyfish Music.

Previous pages (24-27): A sequence of images captured during filming of Wardbukarra. Photos by Skinnyfish Music.









## Markawo cultural camp

A week long camp at Markawo was hosted by Warddeken and run collaboratively with Children's Ground, who operate in the township of Jabiru in neighbouring Kakadu National Park. Over 60 people came from across the Arnhem plateau to learn from elders and spend valuable time on country during this week long camp.

Warddeken rangers and elders facilitated a range of activities for children and young people, many of whom spend little time out bush. Feedback from the camp and from Children's Ground was overwhelmingly positive, with many participants reporting that reconnecting with country and getting away from the troubles that can come with town life made them feel strong and good about themselves.

A highlight of the camp was a large kunborrk (dance) lead by senior Warddeken rangers from Manmoyi community. Dancers of all ages painted up in delek (white ochre), donned bokngarru (grass skirts) and performed a number of ritual dances belonging to various clan estates within the IPA. An unseasonal downpour did not deter the singing or dancing but only added to the excitement of the evening.

Mary Kalkiwarra Nadjamerrek, senior djungkay (ritual manager) for Markawo, said she felt extremely proud to see people sing and dance again on Bolmo country, as it had not happened in a very long time. She reiterated a core value of Nawarddeken landowners, being that these cultural activities, as much as any western scientific management practices, are integral to the health of both country and people.

### Photos

This page: Selone Djandjomerr with mankung (sugarbag native honey). Photo by Bjorn Everts; Dean Yibarbuk painted in delek (white ochre) and ready for the kunborrk. Photo by Bjorn Everts.

Facing page: Culture camp participants enjoy a swim at Njerrmi. Photo by Bjorn Everts; Elizabeth Nabarlambarl explains the process of making and using fibre dillybags during a Bush Classroom workshop on the camp. Photo by Dominic O'Brien.





Another highlight of the camp was a ‘Bush Classroom’ workshop run by senior cultural advisors Berribob Danbungala Watson and Elizabeth Nabarlambarl.

Berribob and Elizabeth, who run Warddeken’s highly successful material culture project based out of the Manmoyi ranger base, have developed a series of cultural lessons that incorporate visual materials and resources, practical demonstrations and hands-on learning. During the two hour workshop Berribob and Elizabeth explained and demonstrated how to use various stone country plants to make items of material culture including spears, fire making tools, baskets, stone axes and grass skirts. The hard work they have put in to developing these Bush Classroom lessons along with their incredible cultural expertise saw Nawarddeken young and old alike transfixed and eager to put knowledge into practice.





## Kulnguki cultural camp

For the third year in a row Warddeken hosted a cultural camp based out of Kulnguki on Mok clan estate. Over the years the camp has been running, children associated with this area of country have spent significant amounts of time with elders and participated in a broad range of cultural activities including preparation of specialist bush foods, basket weaving and spear making, learning to perform ritual increase ceremonies and dancing.

In 2015, a highlight of the camp included a trip to Marlba stone quarry on Bolmo estate. Senior djungkay for Bolmo estate Mary Kalkiwarra Nadjamerrek talked of the significance of the site, explaining to younger people how the quartz was mined, with a ritual required to appease a ngalyod (rainbow serpent) which dwelled in a nearby waterfall plunge pool and was responsible for 'pushing up' the stone, referred to as rainbow serpent eggs. Mary also spoke of the trade routes crisscrossing the plateau that saw this prized stone, which used to make spear tips, make its way to regions such as Kakadu, Katherine and Bulman.

The Kulnguki camp has become a highlight of the year for many Nawarddeken children, in particular those based in larger townships and for whom it represents an opportunity to renew connections to country and culture, which can be difficult to maintain in a growth town.

This year's camp was particularly exciting because it was held immediately before the opening of a new Warddeken initiative, the Nawarddeken Academy. The Nawarddeken Academy, due to be opened in August 2015, will be a small bilingual, bicultural school based out of Kabulwarnamyo community.

Photos

This page: Senior rangers Terrah and Stuart Guymala and Dean Yibarbuk lead a kunborrk at Kulnguki. Photo by Allegra Day. Facing page: Elica Djogiba and Natasha Yibarbuk collecting man-dudjmi (green plum). Photo by Georgia Vallance; Deonica Lansen collecting water lilies. Photo by Georgia Vallance.





It has long been a dream of community members to be able to educate children on country and Nawarddeken within the IPA strongly expressed their desire to develop a curriculum based around the unique culture and country of the Kuwarddewardde. As Kabulwarnamyo is too small to qualify for a school through the education department, Warddeken pursued philanthropic funding through the Karrkad-Kanjaji Trust (see page 43) and has been able to raise enough to launch the Nawarddeken Academy next financial year.

The ongoing opportunity the Kulnguki camp provides for younger generations of bininj to spend time learning on country has ensured a range of customary skills and a broad base of customary knowledge has been passed on from older to younger generations.





## Wildfire suppression



As the seasons turn and the hotter late dry season begins (August to December) the early season burning work undertaken by rangers is tested with the flare-ups of unmanaged hunting fires and lightning strikes. Often the early dry season burning prevents and contains these fires with no response required, but in some cases Warddeken and our neighbouring ranger groups need to respond.

The Kuwarddewardde is rugged and inaccessible, broken with massive sandstone outcrops and incised by steep gorges. It is challenging terrain in which to fight fires. Warddeken rangers go airborne this time of year. In small teams of three our rangers are dropped along remote fire lines by helicopter. Armed with backpack leaf blowers and an uncanny knowledge of country, the rangers take on large wildfires in hand-to-hand combat. The work is hot, hard and would break most people in a day; Warddeken rangers often spend weeks at a time away from home, never complaining and committed to getting the job done.

This season rangers fought four major fires, the biggest being in the Kumarrirbang region. This fire alone involved 1700 man-hours, with rangers firefighting in extremely windy conditions in rugged, inhospitable terrain. Efforts were further hindered by fire moving through areas of long unburned country, however with the assistance of Djelk rangers the fire was eventually brought under control and large tracts of country containing Anbinik forest and rock art were protected.

Other fires were fought at the head of the Cadell River in the east of the IPA, again alongside Djelk rangers, in McCaw Creek in the south of the IPA and in Deaf Adder Gorge in the west of the IPA. All four fires were contained with a significant effort by the Warddeken rangers and our WALFA partner groups.





## Feral animal management

Buffalo occur in many parts of northern Australia and pigs are found across most of the continent. Pigs are a recognised National Threatening Process under environmental legislation. Both buffalo and pigs pollute and erode culturally significant wetlands.

Their wallowing disturbs wetlands, causing erosion, decreasing water quality and destroying bush food crops. They trample and dig up forest seedlings and spread weeds across vegetation communities, impacting on the habitat of native animals.

As well as the damage caused to the Kuwarddewardde, these feral animals impact on Nawarddeken customary practices and safety.

Buffalo and pigs pose a physical threat, spoil our drinking water, and carry and spread diseases. Buffalo, in particular, cause damage to rock art by rubbing against the paintings. Rangers and landowners have been undertaking programs for the control of buffalo and pigs for a number of years. As part of a strategic regional program, aerial culling of buffalo is carried out each year. This is combined with opportunistic culling by rangers. Our monitoring shows that the damage by buffalo has decreased in some areas where control has occurred consistently.

### Photos

This page: Robert Balmana and Greg Lippo with meat for landowners collected during aerial culling operations.

Following pages (Weed management): Jamie Yibarbuk and Keith Nadjamerrek install a sign at a gravel pit contaminated with gamba grass seeds, warning road crews and others not to use the contaminated gravel. The sign was provided by NT Weeds Branch. Photo by Jake Weigl; Suzannah and Rosemary Nabalwad treat rattlepod on the side of the track into the IPA. Photo by Georgia Vallance.

Following pages (Lambalk): Freddy Nadjamerrek with a paining of lambalk. Photo by Georgia Vallance; A lambalk glider. Photo by Teigan Cremona.



## Weed management

The Warddeken IPA is characterised by large expanses of weed-free areas, particularly in the rugged and rocky escarpment regions where limited access and minimal disturbance have prevented weed introductions and spread. There are however areas of the IPA where ongoing vigilance is necessary in managing the control and spread of weeds. These include the numerous outstation communities within the IPA and associated infrastructure, such as powerhouses, rubbish dumps and fishing spots. Each year, rangers from Kabulwarnamyo and Manmoyi work with casually employed outstation community residents to deliver an aggressive program of weed management.

The benefits of employing local outstation residents in this casual capacity includes the ability to tap into local expertise of the location of weed infestations, building capacity of community residents to effectively participate in ranger work and offering short term employment in communities where there is no other paid work available.

Outstation weed management, now underway for nine years, has led to a dramatic and visible reduction in the size and number of infestations of grassy weeds - in particular mission grass - in and around communities within the IPA. The success of this work is evidenced by anecdotal and quantitative data; community members and rangers attest to the near eradication of mission grass from many communities, and geo-referenced data demonstrates both size and extent of infestations has reduced with each year of treatment.

The success of management efforts on controlling mission grass has allowed rangers to focus more effort on managing other weeds such as rattlepod and sida. These weeds, while not as potentially devastating as grassy weeds, still pose a risk to proliferation of native vegetation. Landowners from IPA outstations have also expressed their desire to eradicate all weeds from their communities.





The treatment of grassy weeds along the Maningrida Road has become an increased focal point of weed management activities for rangers. Although the Warddeken IPA does not extend to the Maningrida Road, the risk of introduction of weeds by contaminated vehicles makes ongoing work in this area necessary and crucial. Roadside management activities are often carried out in collaboration with neighbouring Djelk Rangers, also impacted by the spread of grassy weeds into and within their protected area.

The acquisition of two vehicle mounted Quikspray units in 2014 has assisted rangers to undertake roadside treatments more efficiently and effectively, with results of previous years' efforts increasingly apparent, particularly in the problematic 'Dreaming Lady' section of the road, where infestations of mission and gamba grass had previously stretched for kilometres.

In a concerning development over the last year, rangers recorded an increased number of gamba grass infestations along the Maningrida Road. Some infestations are small – two or three plants – but nevertheless pose a significant risk of spreading. Warddeken staff identified the ongoing use of a gravel pit contaminated by gamba grass seeds as one of the contributing factors to this spread and took decisive action to put a stop to the use of gravel from this site. An awareness raising campaign was undertaken to alert local organisations, road crews and ranger groups to avoid the use of this gravel and prevent the spread of gamba seeds and NT Weeds Branch provided signage, which rangers installed at the gravel pit.

Another highlight in weed management this year was a major collaborative effort in Mikkinj Valley, the location of the only infestation of *Mimosa pigra* within the IPA. Undertaken over a week in 2014, these works saw 22 rangers from Kakadu National Park, Njanjma Rangers and Warddeken work together with a focus on controlling outlying infestations of mimosa in the valley. This work took place under the guidance of Fred Hunter who, as well as being chairman for Warddeken, is also one of Kakadu's longest serving rangers with an extensive background in mimosa control in Mikkinj Valley.



## Lambalk: a new species to science?

Recent research into the animal bininj know as lambalk, which for 150 years has been presumed a sugar glider, suggests that it may be a new species to western science. Lambalk are tree-dwelling gliders and a culturally significant fauna species for Nawarddeken, broadly depicted in the rock art and contemporary art of the region.

Warddeken Professors Mary Kalkiwarra Nadjamerrek and Josie Maralngurra also recall that when they were growing up walking the stone country, they kept juvenile lambalk as pets because they were thought to be cute.

Preliminary DNA analysis undertaken by Charles Darwin University has found lambalk are more closely related to squirrel gliders and mahogany gliders, both of which are found in eastern Australia, than they are to sugar gliders. The features of lambalk are reminiscent of sugar gliders in terms of body size, and squirrel gliders in their length of tail and pointiness of snout. The discovery of a new mammal species is extremely rare and further research will be undertaken to ascertain whether lambalk are indeed a new species to western science, or if they are a sub-species of squirrel glider, in which case it means a wide expansion of the known range of the species.

For a week in September 2014 female rangers from Manmoyi and Kabulwarnamyo ranger bases worked with scientists from CDU to trap lambalk to collect DNA samples to further research. Unfortunately lambalk numbers seem to have declined in trend with other small mammal species across the Kuwarddewardde and no lambalk were captured in the course of the research. Although rangers across the IPA frequently report lambalk sightings while undertaking fieldwork they are seen far less commonly than in years gone by. Despite trapping efforts proving unsuccessful, the collaborative research was a good opportunity to document knowledge from both toolboxes, with elders sharing their knowledge of lambalk ecology and behavior and scientists sharing knowledge about the potential new species.





## Rock art survey: Moon Dreaming country

When late dry season wildfires tore through the Murrin Kumarrirri estate, Moon Dreaming country, in the north of the IPA in August 2014, rangers firefighting in the region noticed many rock art galleries and occupation sites that had not been documented or recorded. Many of these sites had likely been lost from memory since the depopulation of the plateau.

Customary burning by old people would have kept these sites open and visible, and the silver lining of the destructive wildfires in the region was that these places revealed themselves again to Nawarddeken.

After the fires had opened up country it seemed a good time to take landowners to visit cultural sites, record the rock art there, check on threats to the sites and undertake conservation measures and provide training to rangers in managing cultural heritage. For many landowners and rangers this was the first the time they had visited cultural sites within the Murrin clan estate.

Peter Cooke was engaged as a consultant to run the project and began by consulting senior Murrin landowners Kevin Buliwana and Timothy Nadjowh AO about the proposed work. Both were supportive of the project. Linguist Dr Murray Garde provided videos recorded with some of the late Warddeken professors discussing places within the region and some of these videos were played for rangers before commencing the survey, providing valuable cultural context to the work.

Warddeken rangers worked alongside landowners and djungkay to undertake the survey, which occurred over five days in December 2014. During the survey 16 sites were comprehensively recorded and close to 1000 photographs were taken. Rangers are currently in the process of adding this data to Warddeken's Bidjerrin Cultural Database.









At each art site rangers recorded a GPS location, took a photo of the geographic location of the rock art, took photos of panels and individual paintings with and without measuring and colour scale sticks and then recorded the site in detail using a specially designed program on an iPad.

Typical of rock art across the Warddeken IPA, the survey documented a variety of art styles painted over many thousands of years along with numerous occupation sites containing spear tips, grinding stones and stone axes. Some sites and paintings were of particular cultural significance and many demonstrated the highly skilled techniques of the artists or ancestor beings who placed the paintings on the rocks.

Perhaps the most spectacular and significant site recorded was the Marrirn Moon Dreaming painting at Dird Kakaberrkeyo, seen for the first time during the survey by landowners and djungkay.

The survey recorded many important sites within Murrirn clan estate, however it was not possible within the timeframe or budget to comprehensively survey the estate in its entirety. Given Murrirn estate is only one of forty within the Warddeken IPA, it highlights the massive challenge ahead of Warddeken to comprehensively record and conserve the full body of world heritage standard art across the IPA. The primary reason for this documentation is its importance to Nawarddeken as an integral part of their cultural heritage, however it is also significant to Australia and the rest of the world as the oldest form of human artistic expression.

#### Photos

This page: Derek Nagurrurrba assists to record an art site with a measuring and colour scale stick. Photo by Peter Cooke  
Facing page: Rangers Terrah Guymala, Stuart Guymala and Jonah Djumbirri during the survey work. Photo by Peter Cooke.  
Previous page: Rangers and landowners look on in awe at the magnificent Moon Dreaming painting at Dird Kakaberrkeyo. This was the first time any of them had visited the site. Photo by Peter Cooke.  
Following page: Dean Yibarbuk and Serina Namarnyilk collecting sugarbag, the native honey. Photo by Rowand Taylor.









## KARRKADKANJDI TRUST

The Karrkad-Kanjdi Trust (KKT) was established in 2009 by Traditional Owners to support the people, country and culture of the Warddeken and Djelk IPAs. Together, the two IPAs span over 2 million hectares and represent one of Australia's most unique natural and cultural landscapes.

The Karrkad-Kanjdi Trust provides support by acting as the philanthropic arm of Warddeken and Djelk. In the short term, the Karrkad-Kanjdi Trust connects passionate supporters and organisations with Traditional Owners to help raise funds for meaningful projects in the two IPAs. In the long term, the Karrkad-Kanjdi Trust is building an endowment designed to secure this valuable work in perpetuity.

The Karrkad-Kanjdi Trust operates independently from locally based Indigenous organisations and is led by Indigenous and non-Indigenous directors, including experts in natural and cultural resource management, finance, fundraising and economic development.

This year the The Karrkad-Kanjdi Trust partnered with Warddeken Land Management Ltd. to establish the Nawarddeken Academy – a unique Indigenous primary school in the community of Kabulwarnamyo. As well as helping to ensure that children receive a high quality education on the country they call home, the project has facilitate the growth of rich and meaningful relationships between supporters, their families and members of the Kabulwarnamyo community. In many ways, the Nawarddeken Academy project has been and continues to be, a family journey that has lead to mutual respect and an appreciation of the unique culture and way of life in west Arnhem Land. The success of the Nawarddeken Academy reflects the strength of these relationships and is a testament to a true partnership between Bininj (Indigenous) and Balanda (Non Indigenous). The clear local ownership of the project and the committed involvement of key supporters has set a benchmark to which future Karrkad-Kanjdi Trust projects will aspire.

# Warddeken staff

**Expert consultants:** Mary Kalkiwarra Nadjamerrek, Ruby Bilidja, Deborah Nabarlambarl, Josie Maralngurra, Jack Djandjomerr, Timothy Nadjowh, Wurdib Nabalwad, Leonie Guymala, Leanne Guymala and Lillian Guymala

**CEO:** Shaun Ansell

**Financial controller:** John O'Brien

**Operations manager:** Jake Weigl

**Administration, research and training manager:** Georgia Vallance

**Remote ranger coordinator:** Alex Debono

**Senior ranger coordinator:** Nigel Gellar

**Senior rangers:** Dean Yibarbuk, Terrah Guymala, Stuart Guymala, Keith Nadjamerrek.

**Warddeken rangers:** Freddy Nadjamerrek, Berribob Dangbungala Watson, Joeline Miller, Jenny Nadjamerrek, Sylvia Ragurk, Elizabeth Nabarlambarl, Margaret Guymala, Joel Naborlhborlh, Stuart Guymala, Keith Nadjamerrek, Lindsay Whitehurst, Jamie Billis, Manoah Nawilil, Mitchell Nabarlambarl, Bobby Maralngurra, Gavin Namarnyilk, Darius Maralngurra, Ray Nadjamerrek, Greg Lippo, Jeshua Djandjomerr, Len Naborlhborlh, Rodney Naborlhborlh, Ross Guymala, Casten Guymala, Regan Gellar, Ricky Nabarlambarl, Lewis Naborlhborlh, Joe Guymala, Lester Guymala, Casten Guymala, Winston Naborlhborlh, Maxie Dululuma, Marshall Bangarr, Deon Koimala, Elkanah Dullman, Emmanuel Namarnyilk, Graham Namarnyilk, Zacharia Namarnyilk, Christopher Ngabuy, Zebedee Ngabuy, Leslie Ngabuy, Nicodemus Nayilibidj, Willie Nabalwad, Justin Nayilibidj, Serena Namarnyilk, Rhonda Nadjamerrek, Sharna Dakgalawuy, Antonia Djandjomerr, Vietta Bangarr, Elizabeth Bangarr, Helena Malanga, Ruth Guymala, Ruth Nabarlambarl, Sarah Billis, Edna Midjarda, Jeraiah Guymala, Jean Burrunali, Jalisa Koimala, Martha Cameron, Cecily Murrukula, Justina Namarnyilk, Lorna Nabalwad, Karl Makin, Marlene Cameron, Rosemary Nabalwad and Suzannah Nabalwad.

**Other valuable help from:** Alys Stevens, Chris Bald, Jeremy Freeman, David Bond, Dr Murray Garde, Paul Josif, Calvin Murakami, the Djelk Rangers, Bjorn Everts and KKT, Alex "Batman" Ernst, Simon Owen, Ian Munro, Jabiru NLC, Ken and Jenny at Jabiru Foodland, Emma Ignjic and David Hancock.



# Training

The last twelve months have seen an increased focus on work ready training, with over fifty rangers gaining certifications in a range of skills including chainsaws, quad bikes, four wheel drive recovery, small engine maintenance, workplace health and safety, firearms and first aid. Twenty-four rangers also undertook Basic Wildfire Awareness training with Bushfires NT staff.

Accessing accredited training is costly given the remoteness of Warddeken’s ranger bases, however the company recognises the importance of having a team of appropriately licenced and trained rangers in the field and is placing greater emphasis on working towards Certificates in Conservation and Land Management for permanent staff.

Additional to accredited training, senior rangers and IPA management staff regularly mentor and support less experienced rangers, providing on-the-job training in range of project areas including fire management, weed control and cultural site maintenance. A strategy Warddeken employs to ensure skills transfer within the existing staff pool is to partner new rangers with senior rangers, allowing new staff to learn from more experienced members of the team. New staff are also encouraged to participate in a broad range of activities, which allows them to experience the broad suite of projects Warddeken implements and in doing so, discover which areas of the work program are of most interest to them.

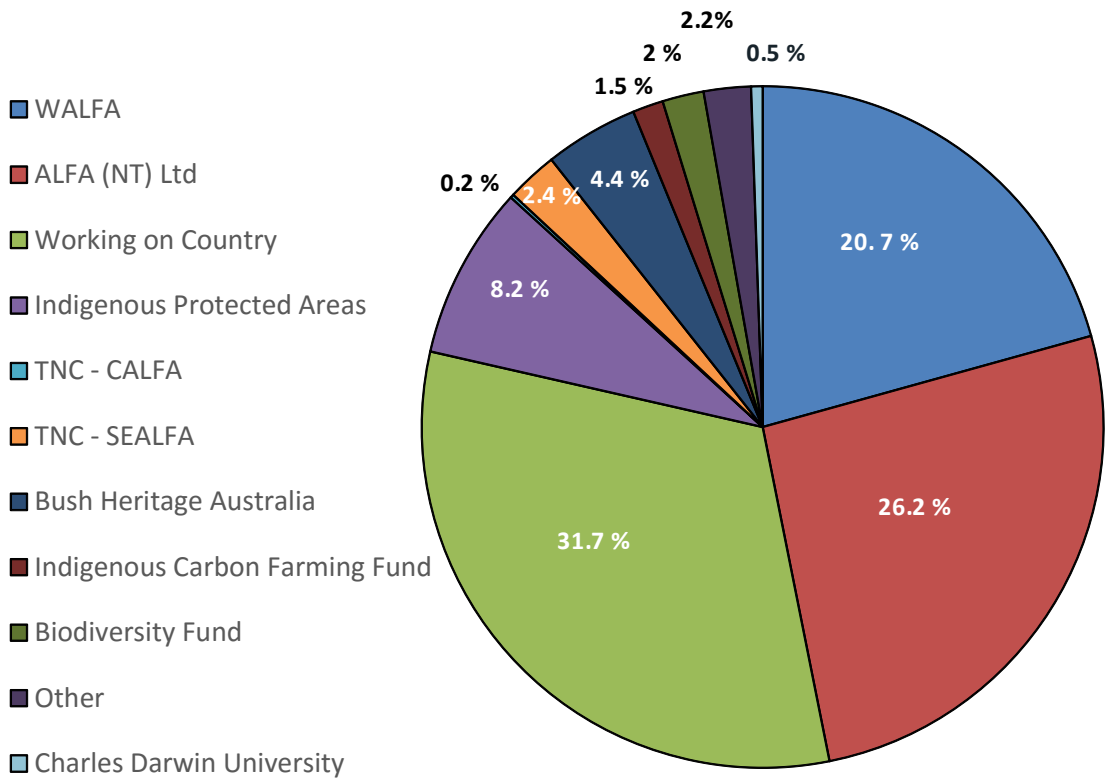
## Photos

This page (top to bottom): Josh Cameron during Operate Quads training; Zacharia Namarnyilk during Firearms A & B training; Mechanic David Bond with Lindsay Whitehurst and Freddy Nadjamerrek in the Kabulwarnamyo workshop; Suzannah Nabalwad during Operate Quads training. Photos by Georgia Vallance.





## Our funding sources in 2014–2015



Photo

This page: Rangers walking through the kuwarddewardde’s rocky outcrops. Photo by Rowand Taylor.



Warddeken acknowledges and thanks the many organisations, supporters and project partners who have helped in 2014–2015 in addition to those whose logos appear below:



**Australian Government**



**Northern  
Territory  
Government**



**PEW**  
ENVIRONMENT GROUP



**Northern Land Council**



**BUSH HERITAGE**  
AUSTRALIA



**Australian Government**  
**Indigenous Land Corporation**



*Our heart & soul*



**KARRKADKANJDJI**  
TRUST



**kakadu**  
NATIONAL PARK

# Warddeken Land Management Limited

ABN 12 128 878 142

Extract from the Financial Statements

For the year ended 30 June 2015

	2015	2014
	\$	\$
<b>Income Statement</b>		
Grant revenue	4,035,432	2,823,441
Other income	92,221	100,196
Employee benefits expense	(1,334,414)	(1,284,633)
Depreciation, amortisation and impairments	(126,519)	(116,411)
Hire of plant and equipment	(364,573)	(301,521)
Repairs and maintenance	(204,871)	(271,639)
Other expenses	(850,678)	(1,033,824)
<b>Income / (loss) before income taxes</b>	<b>1,246,598</b>	<b>(84,391)</b>
	2015	2014
<b>Statement of Financial Position</b>		
	\$	\$
<b>ASSETS</b>		
<b>Current assets</b>		
Cash and cash equivalents	1,658,879	453,249
Trade and other receivables	38,850	82,579
<b>Total current assets</b>	<b>1,697,729</b>	<b>535,828</b>
<b>Non-current assets</b>		
Property, plant and equipment	719,137	703,142
<b>Total non-current assets</b>	<b>719,137</b>	<b>703,142</b>
<b>TOTAL ASSETS</b>	<b>2,416,866</b>	<b>1,238,970</b>
<b>LIABILITIES</b>		
<b>Current liabilities</b>		
Trade and other payables	375,776	431,469
Borrowings	10,622	-
Employee provisions	32,858	36,791
Other Liabilities	-	19,698
<b>Total current liabilities</b>	<b>419,256</b>	<b>487,958</b>
<b>TOTAL LIABILITIES</b>	<b>419,256</b>	<b>487,958</b>
<b>NET ASSETS</b>	<b>1,997,610</b>	<b>751,012</b>
<b>EQUITY</b>		
Retained earnings	1,997,610	751,012
<b>TOTAL EQUITY</b>	<b>1,997,610</b>	<b>751,012</b>

The accompanying notes form part of these financial statements.



## Warddeken Land Management Limited

ABN 12 128 878 142

### Report of the independent auditor on the summary financial statements to the members of Warddeken Land Management Limited

The accompanying summary financial statements, which comprise the statement of financial position as at 30 June 2015, the income statement for the year then ended and related notes are derived from the audited financial report of Warddeken Land Management Limited for the year ended 30 June 2015. We expressed an unmodified audit opinion on that financial report in our report dated 15 September 2015.

The summary financial statements do not contain all the disclosures required by Australian Accounting Standards. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial report of Warddeken Land Management Limited.

#### *Directors' Responsibility for the Summary Financial Statements*

The Directors are responsible for the preparation of a summary of the audited financial report on the basis described in Note 1.

#### *Auditor's Responsibility*

Our responsibility is to express an opinion on the summary financial statements based on our procedures, which were conducted in accordance with Auditing Standard ASA 310 *Engagements to Report on Summary Financial Statements*.

#### *Opinion*

In our opinion, the summary financial statements derived from the audited financial report of Warddeken Land Management Limited for the year ended 30 June 2015 are consistent, in all material respects, with that audited financial report, on the basis described in Note 1.



PERKS AUDIT PTY LTD

180 Greenhill Road

Parkside SA 5063



PETER J HILL

Director

Dated this 15th day of September 2015





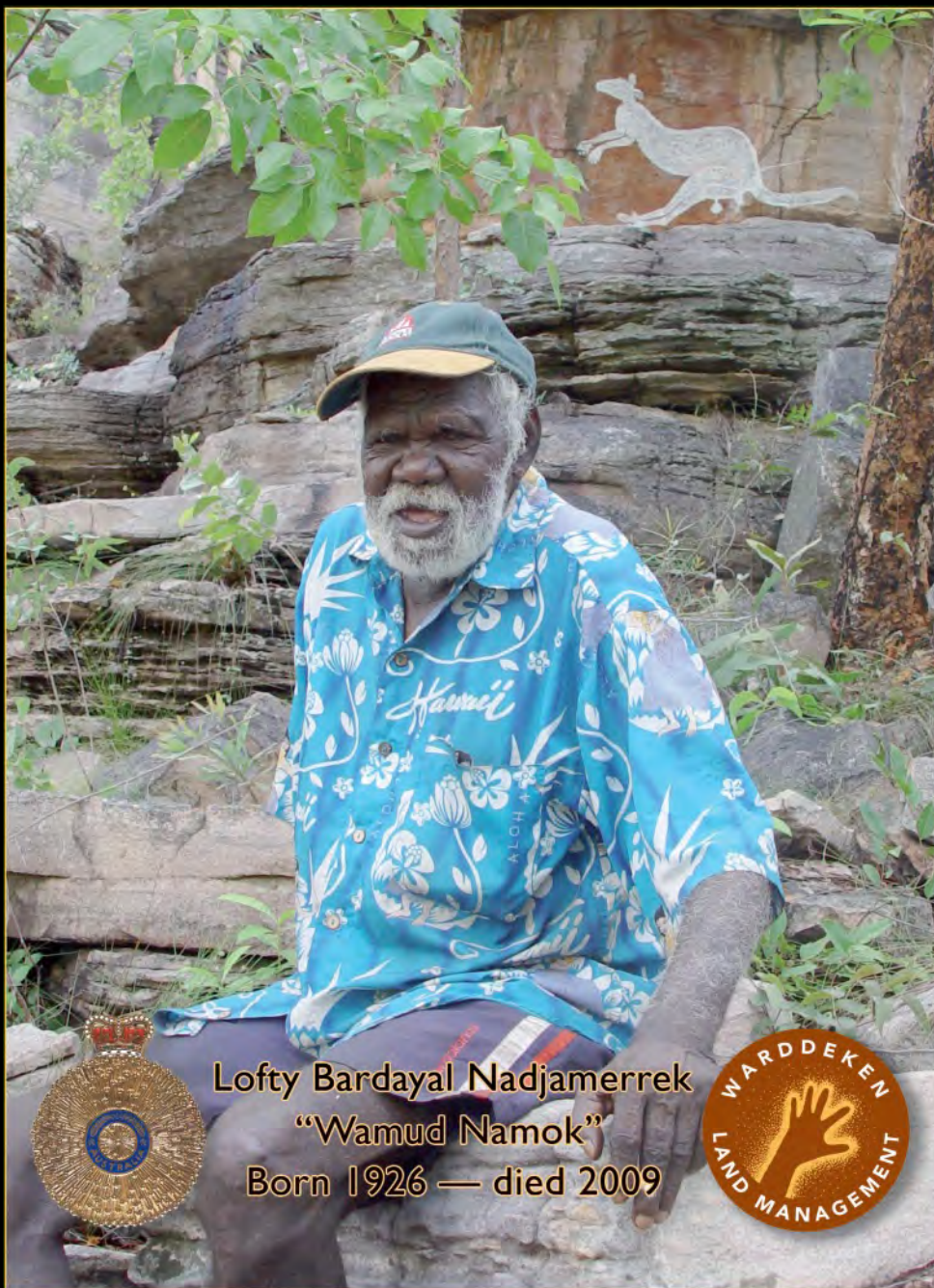
Photos

This page: Children run through the Kabulwarnamyo spring. Photo by Rowand Taylor.

Back cover: Mitchell Ngabuy strikes a pose on top of the escarpment. Photo by Rowand Taylor.



## HIS SPIRIT LIVES WITH THOSE WHO CARE FOR COUNTRY



Lofty Bardayal Nadjamerrek  
"Wamud Namok"  
Born 1926 — died 2009

*Yakkake Wamud Na-mok, djorrhbayeng, ngundi-manjbun rowk bu kan-bukkabukkang ngadberre an-garre na-warddeken, kan-kangemang ngadberre Wamud. Munguyh-munguyh arri-djalbengan ngudda. Kun-malng ke ka-rrundeng kore An-kung Djang, kore Djabidj Bakoluy, kore Kundjorlomdjorlom, Nabiwo Kadjangdi, Ankung Kangeyh, Kabulwarnamyo, kore "the dear one", you Wamud will always be our "dear one".*



**WARDDEKEN LAND MANAGEMENT LIMITED**

**An Indigenous not-for-profit conservation company  
from the western Arnhem Land Plateau.**

**ABN: 12 128 878 142**

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***Ngarridjarrkbolknahnan kunred***  
**Looking after country together**