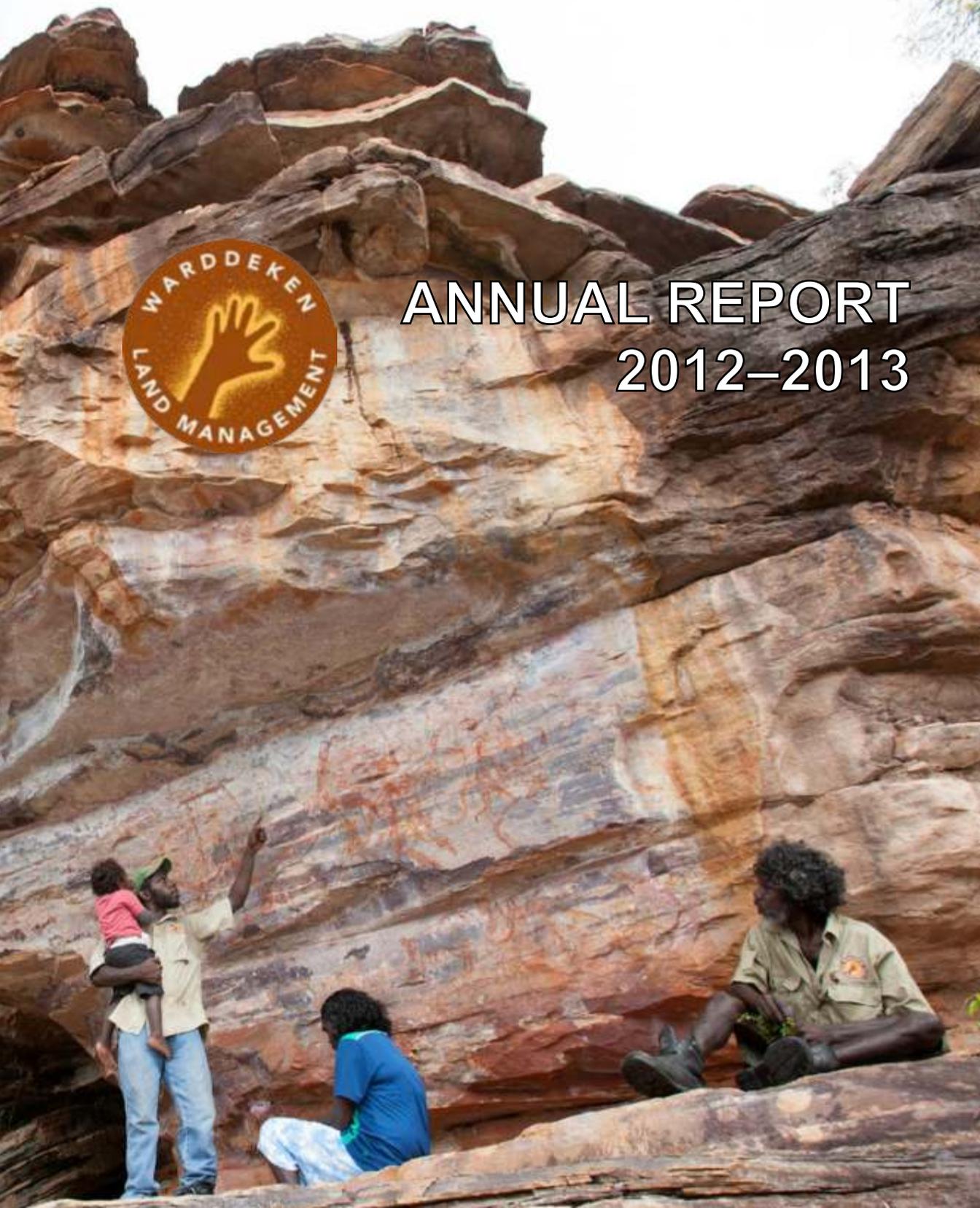


WARDDEKEN LAND MANAGEMENT LIMITED



ANNUAL REPORT 2012-2013



Warddeken Land Management Limited Annual Report 2012–2013.

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

Unless otherwise stated, all photographs are copyright Warddeken Land Management. Special thanks to the Nadjamerrek family for permission to use images of Wamud Namok and his country.

Warddeken wishes to thank Alys Stevens and Jon Altman 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, Lofty Baradayal 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: Wet Season stream. Photo source David Hancock.

Cover page: Three generations of Mok clan members—Keith, Ray and Richard Nadjamerrek at a rock art site near Djamarr (with Ray’s wife Eliza Nawirridj). Photo source David Hancock.



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

We want to work with partners to achieve mutually agreed objectives using Indigenous and Western science-based systems.

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



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Photos:

This page: Sandstone Grevillea species. Photo source David Hancock.

Facing page (top to bottom): Kabulwarnamyo outstation sign, a Balabala at Makkalarl, Keith Nadjamerrek and the Warddeken IPA sign, aerial photo of Kabulwarnamyo’s ranger shed. Photo source David Hancock.

Warddeken Story

Warddeken Land Management is a company established by Nawarddeken, people of the western Arnhem Land plateau in Australia's Northern Territory, to manage their land and its natural and cultural resources.

Guided by visionary elder Bardayal 'Lofty' Nadjamerrek, the foundations for Warddeken were established over a number of years as landowners actively sought to reoccupy their ancestral country on the Plateau. Like Traditional Landowners in other parts of northern Australia, Nawarddeken had gradually moved off their lands during the 20th Century into the rapidly growing larger regional settlements.

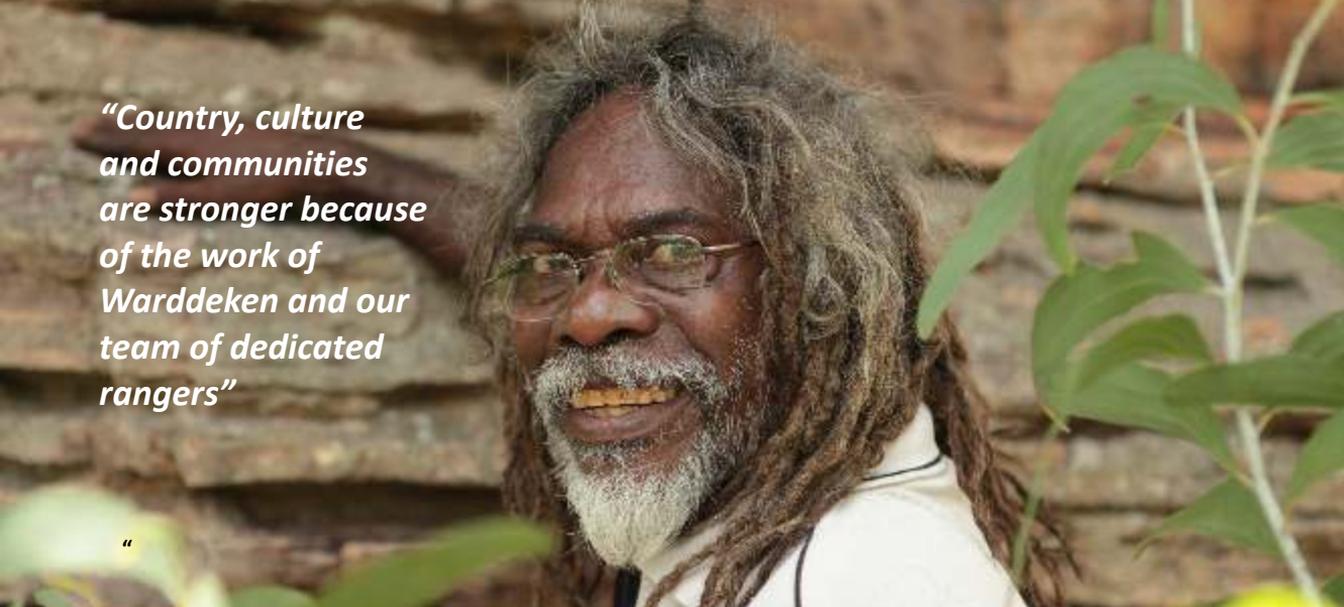
However, soon after the last people left the plateau, a new movement of return began. Formal cultural site surveys in the 1990s were followed by the creation of a small outstation, Kabulwarnamyo, early in the new millennium. Initially focused on re-establishing traditional fire management practices in the Arnhem Plateau, the community-based indigenous land management group based out of Kabulwarnamyo was involved in pioneering a number of innovative projects including the West Arnhem Land Fire Abatement (WALFA) project.

In 2007 Warddeken Land Management Ltd was formally registered as a not for profit public company, limited by guarantee. Shortly after, in 2009 the Warddeken Indigenous Protected Area was declared. The Warddeken IPA covers 1,394,951 hectares of spectacular stone and gorge country on the Western Arnhem Land Plateau. Including the estates of 40 clan groups, the Warddeken IPA is globally significant for its natural and cultural values and is home to dozens of endemic plants, threatened species and a unique ecological community – the Arnhem Plateau Sandstone Shrubland Complex.

Today, Warddeken is an innovative Indigenous Land Management organisation tasked with coordinating the management of the IPA and building Indigenous management capacity. Warddeken assists Landowners to make decisions about their country by increasing their understanding and knowledge of conservation issues and providing the resources needed to implement those decisions.



“Country, culture and communities are stronger because of the work of Warddeken and our team of dedicated rangers”



Chairman’s Report Dean Mununggullumurr Yibarbuk

Writing my Chairman’s report, I am reminded that it is always good to stop and take the time to reflect on the achievements of Warddeken.

Our company has grown from its humble beginnings and we are often so busy moving forward that we can forget to take the time to look back and feel proud of all that we have achieved. Because we have achieved so much in our first five years managing the Warddeken Indigenous Protected Area - people’s country, culture and communities are stronger because of the work of Warddeken and our team of dedicated rangers, and for this we should be very proud.

I would like to acknowledge my fellow Board member’s enthusiasm and commitment to making our stone country company strong, robust and representative of the aspirations of our members.

I would also like to thank our partners for their belief in us and for walking alongside us as we strive to keep the culture and country of the *Warddewardde* (stone country) strong.

In the coming year we will be focused on talking with our members and landowners about the new IPA Plan of Management. We will find out what they want to see for their country and how they would like Warddeken to help them achieve this. I look forward to talking with many of you about this.

We will also be taking the time to reflect on the great work we have done in the last five years; celebrating our achievements and feeling pride in the ways we are keeping the vision of our ancestors alive.

Photos:

This Page: Dean Mununggullumurr Yibarbuk. Photo source Keith Tuffley.

Facing Page: Board of Directors (absent from photo: Fred Hunter and Jessie Alderson). Photo source Peter Cooke.



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 koyiek (east). At 30 June 2013 representatives were:

Kakbi: Sylvia Badari, Kevin Bulliwana, Suzannah Nabalwad
Wardjak (Maburrinj), Danek (Gudjumarndi), Ngalngbali (Kudjekbinj), Yurlhmanj (Djalbangrurrk), Madjuwarr (Kunukdi), Marrirn (Gumarirrnbang), Wurrik (Mandedjkadjang), Mayirrkulidj (Djurika), Durlmangka (Kudjaborn/Kunburray), Djok (Ngolwarr), Barrbinj (Gumarirrnbang/ Kudjarlrdordo)

Karrikad: Jessie Alderson, Fred Hunter, Kenneth Mangiru
Manilakarr Urningank (Mikginj), Maddalk (Kumalabukka), Wardjak/Worrkorl (Balmana from Kundjikurdubuk), Bolmo (Dedjrungi and Dodekiyu), Badmardi (Balawurru, [succession/caretaking]), Wurnkomku (Nawoberr)

Walem: Joelene Miller Christopher Ngabuy, Dean Yibarbuk,
Djorrrolom (Bamo), Murruba (Morre), Karnbirr (Djohmi), Mimbilawuy (Garlngarr), Barabba (Mimbrung), Mandjuwarlwarl (Bobbalinjma), Barradj (Yangkobarnem), Bulumo (Makkebowan)

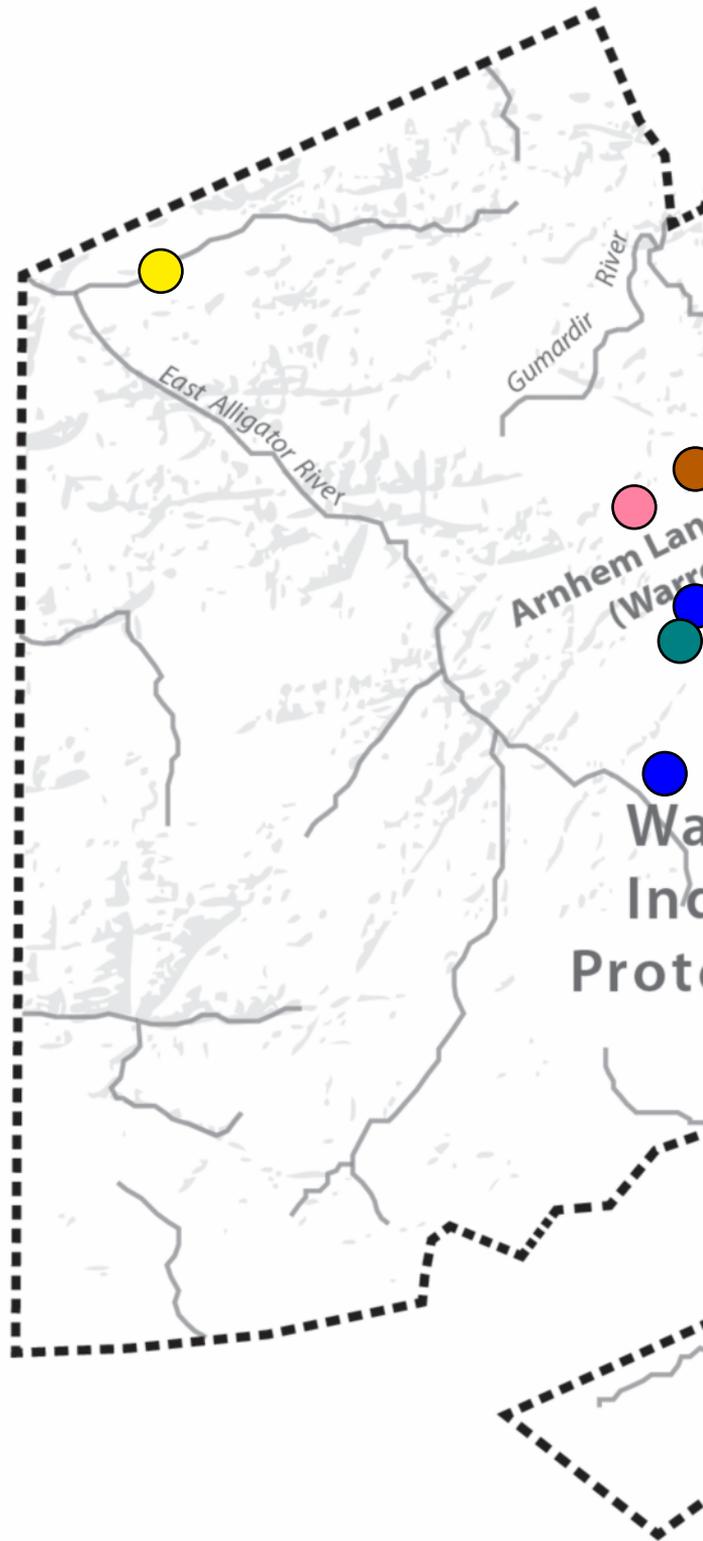
Koyiek: Terrah Guymala, Sarah Nabarlambarl Billis Lois Nadjamerrek,
Bordoh (Ngorlkwarre), Mok/Berdbird (Mankungdjang/ Ngalkombarle), Yamarr (Kidbulmanyamara), Kulmaru (Kubumi), Bolmo (Marlkawo), Rol (Bolkngok), Djordi/Djorrolom (Kodwalewale), Buluwunwun (Walangandjang), Wurrbarn (Nabrang), Warridjingu (Boburrk), Yamarr (Kidbulmanyamarra)

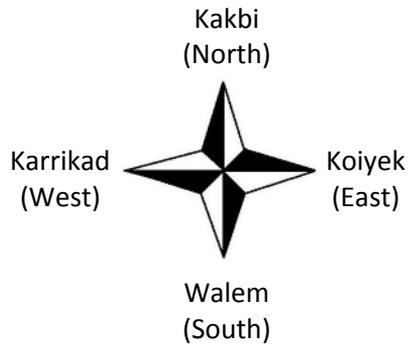
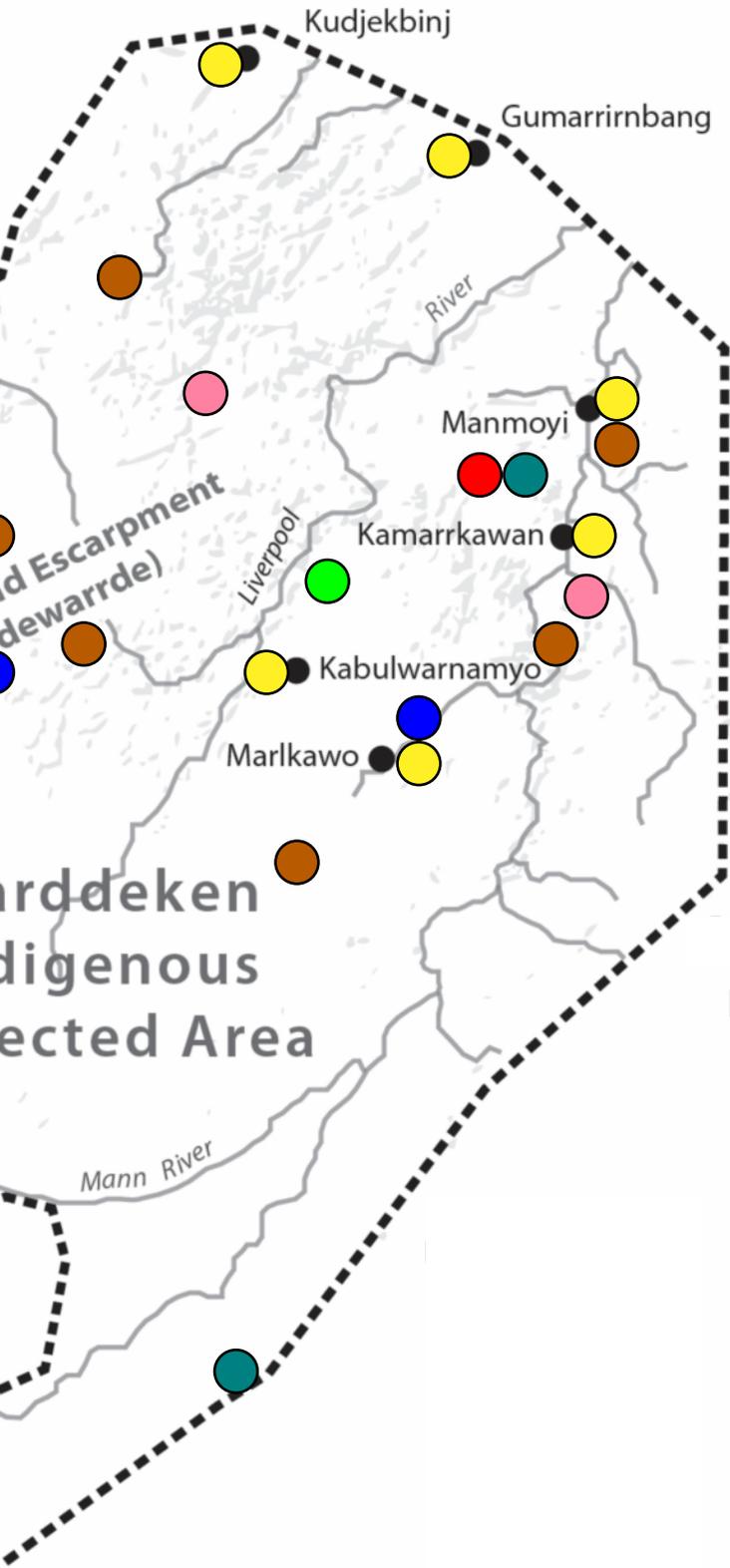
Map of Key Works within Warddeken IPA

The Warddeken Indigenous Protected Area is located in western Arnhem Land in the Northern Territory of Australia. The IPA covers 1,394,951 hectares of spectacular sandstone and gorge country and encompasses six outstation communities: Kabulwarnamyo, Manmoyi, Kamarrkawan, Marlkawo, Gumarrirbang and Kudjekbinj.

The Warddeken IPA borders Kakadu National Park to the west and the Djelk IPA to the north east. The area is home to dozens of endemic plants, a host of threatened species and a new and unique threatened ecological community—the sandstone heathlands.

-  Weed management
-  Culture camp, biodiversity survey and fire drive at Ngankan
-  Culture camp at Kulgnuki
-  Anbinik mineral earth breaks
-  Fire fighting
-  Strategic buffalo control
-  Rock Art Conservation







Fire Management

Continuing the tradition of the last decade, the management of fire in the west Arnhem Land plateau remains an integral focus for Warddeken Land Management. As in previous years, Warddeken staff undertook extensive planning with IPA Landowners and Djungayi (managers) to determine how they would like prescribed burning activities to be undertaken within the 40 Indigenous clan estates that comprise the IPA. Using maps of last year's fire scars, Landowners make decisions about where to implement aerial and on-ground burning to create a patchy mosaic of burns as well as effective fire breaks through the landscape.

Warddeken uses helicopters to traverse the expanse of the rugged IPA, dropping incendiary capsules from a Raindance machine which fall to the ground and ignite. A focus of aerial burning is to ignite old fuel loads (grass that is 2–3 years unburnt) as well as to break up the high and low areas of country by burning the edges of the escarpment. Aerial burns are complemented by finer-scale ground burning from motor vehicles (4WD or Quad bike) or by walkers using matches and drip torches to create more effective barriers and in particular, around sensitive vegetation communities or cultural sites.

In the early dry season of 2013, Warddeken staff and Landowners spent 40 days in the helicopter undertaking aerial prescribed burning. This involved flying a cumulative distance of 14,790 km and delivering 118,000 incendiary capsules. This was further complemented with over 3000 hours of ground based burning. Throughout the burning season over fifty rangers and elders were involved in Warddeken's fire management program.

Warddeken are key partners in the West Arnhem Land Fire Abatement (WALFA) project. Signed in 2006, this WALFA is a contractual arrangement between Darwin Liquefied Natural Gas Pty Ltd (DLNG), and the Northern Territory Government. The aim is to reduce greenhouse gas emissions by implementing strategic early dry season fire management over western Arnhem Land to reduce the size and extent of unmanaged wildfires. Addressing the concerns of Traditional Owners, WALFA has re-established effective management of fire at a regional scale by bringing Aboriginal managers and fire management back to country that had been unmanaged for a significant period of time.

Warddeken are one of five Indigenous ranger groups who receive funding through WALFA to implement an annual coordinated program of strategic EDS prescribed burning combined with active suppression of LDS wildfire. In 2012, the WALFA partners delivered an emissions abatement substantially less than the 100,000t CO₂-e that is required under the WALFA Agreement. Based on the original 2004 emissions calculation methods, the abatement for 2012 was a disappointing 31,290 CO₂-e.

Warddeken's involvement in this innovative commercial agreement has paved the way for formal recognition of savanna burning abatements under the Australian Government's Carbon Farming Initiative (CFI). The WALFA partners received funding in early 2013 from the Indigenous Carbon Farming Fund to start a process of formal transition to the CFI.

This year Warddeken implemented large-scale on-ground strategic burning projects to protect infrastructure as well as cultural and environmental assets within the IPA. The protection of rock art sites, Anbinik forest and the reintroduction of a fire drive are described in more detail in following sections of the Annual Report.

Despite intensive prescribed burning activities, twenty late dry season wildfires occurred within the Warddeken IPA in 2012. A heavy and prolonged wet season created changes to grassy fuel accumulation and curing with the result that fires that year did not behave as generally expected. For example, a "cleaning up country" fire was lit by a senior Landowner in September close to the Liverpool River. It was expected that the river would act as a natural break to stop the fire. However, the fire unexpectedly crossed the Liverpool and established a foothold in rocky long-unburnt country. In this case, the Warddeken Rangers put in a tremendous effort working to bring this fire under control. In doing so, they prevented the fire from tripling in extent and becoming more intense with the later seasonal conditions.

Photos:

This Page (top to bottom): Josie Maralngurra rides in a helicopter for this first time, directing aerial prescribed burning in her clan estate; Warddeken and Djelk discuss early burning plans at the WALFA pre-season meeting; Suzannah Nabalwad guiding burning across her country; Creating a mineral earth fire break around Anbinik.
Facing Page: Fire Management. Photo source David Hancock.





Biodiversity Surveys

In 2012 – 2013 Warddeken have continued to learn more about the unique biodiversity of the IPA with a focus on endemic, threatened and culturally important species. Warddeken rangers have been working in collaboration with NT Government scientists to undertake biodiversity surveys to gain more information on the best survey methods for use in the Plateau and threats to biodiversity in the IPA.



The use of camera traps or motion sensor cameras within the Warddeken IPA seems to be a particularly productive method for surveying for mammal species. Camera traps are relatively straightforward and surveys can be easily conducted by rangers without an ecologist being present. Another benefit is that the camera methodology does not require a large amount of equipment and time like other survey methodology. The downside is that sometimes it is difficult to get accurate identifications of species from the photos, particularly for smaller animals. Camera traps also produce a huge number of pictures and image storage and data analysis are two major issues which need to be considered in order for it to be a useful and valid monitoring tool for rangers.



This year, two major biodiversity surveys were conducted in connection with the annual culture camp at Ngangkan in July 2012 and June 2013. Ngangkan 2012 was the first large-scale cultural and survey camp run in the Manmoyi and Kamarrkawan area. With the help of NTG Biodiversity Scientists Alys Stevens and Stuart Young, 18 sites were surveyed using 240 traps including motion sensor cameras, cage, Elliot, pitfall and funnel traps. Survey highlights included catching three false antechinus and finding chameleon dragons for the first time in over 20 years. More populations of *yirlinkirrkirr*, the white-throated grasswren, were also found. These birds are an important indicator of good fire management within the Warddeken IPA.



Ngangkan 2013 had over 50 participants from the local outstations as well as from Gunbalanya. Survey participants were very happy to spot chameleon dragons for the second year in a row. However, small mammal numbers were down from previous years adding further weight to the grim outlook for small critical weight range mammals.



Feral Cat Research

The collaborative feral cat research project between Warddeken and the National Environmental Research Project (NERP) is now well underway. Between October and December 2012, Rangers from Manmoyi and Kamarrkawarn outstations undertook a specific feral cat survey using camera traps and conducting walking and spotlighting patrols. Rangers conducted walking patrols over more than 200 km of country that is inaccessible by car looking for feral cat tracks and walking routes. The rangers found more than 100 feral cat tracks and this method is proving to be one of the most useful non-intrusive measures of cat occupancy. An added bonus was that Rangers found that by walking they could also check up on country as well as look for feral cat activity.

Over the survey period, Rangers drove a series of designated transects undertaking spotlighting patrols. Staff drove the 60 km transects 5 times (over 50 hours) and recorded 14 individual cats. Unfortunately, initial trials suggest that cats are very hard to catch on the camera traps. However, as part of the NERP project, rangers are now trialing different baits in order to make camera trapping more effective.

In April 2013, Warddeken director Terrah Guymala and Alys Stevens featured on SBS's Insight program talking about feral cats within the Warddeken IPA. On the program, Terrah explained the impact that feral cats are having on native animal populations and why Landowners are concerned about the decline in native species. Alys spoke more broadly about the potential numbers of cats throughout the IPA and the damage that is occurring both within the Warddeken area and throughout northern Australia. A transcript of the "Eradicat" Insight episode can be found at: <http://www.sbs.com.au/insight/episode/transcript/532/Eradicat>

Photos:

This page: Feral cat trap showing bait station; Feral cat caught on camera trap; Terrah and Alys on Insight. Photo source NTG.

Facing Page: False Antechinus; Chameleon dragon; Spotted Tree Goanna; Manmoyi school student with a motion sensor camera trap. Photo source Alys Stevens.



Culture Camp at Ngangkan

During the July 2012 school holidays, Rangers from the Manmoyi, Kamarrkawan and Kabulwarnamyo ranger bases along with their families and lots of kids all descended on Ngangkan for the annual Culture Camp. Ngangkan is a peaceful place on Ngorlkwarre country with plentiful bush tucker – ideal for getting away from town, sharing memories and most importantly, for kids to learn about cultural knowledge.

Over the 14 day camp more than 130 people were involved in a number of different cultural activities. This included gathering bush tucker and cultural materials (e.g. Pandanas for weavings and timber for digging sticks), material culture lessons (e.g. making spears, baskets and fish nets), language workshops, knowledge sharing in the evenings, corroborees with singing and dancing, traditional cooking, making music with traditional instruments as well as everyday knowledge sharing. Over 30 children and young people were involved in this knowledge exchange.

Building on our two-toolbox approach to conservation and land management, some of our Rangers also learnt interview skills to help them record vital traditional knowledge from elders so that it can be incorporated into planning for and managing the Warddeken IPA.

Another main focus of the culture camp was to undertake animal surveys in the region as described in the previous section. This year, Landowners were very excited to find two chameleon dragons, *ngalwalngurru*, the totem for the Nabarlarmbarl family and a species not seen for over 20 years.

Photos:

This page: Dancing at the Culture Camp.

Facing Page (clockwise from top left): Ricky Nabarlarmbarl setting up a camera trap; Michelle Bangarr and Helena Malanga; Shamyah Guymala records Elizabeth Nambarlbarl weaving Pandanus; Jamie and Sylvia camping at Ngangkan; Leanne Guymala, Helena Malanga and Edna Midjarda collecting yellow ochre roots for dying Pandanus.





Fire Drive at Ngangkan

The last major kangaroo fire drive in the Warddewardde was in 1980 at Namilewohwo in the Djordi clan estate. Documented by anthropologist Prof. Jon Altman, this *manwurrk kunjken* included a number of now-deceased relatives of Warddeken rangers. The unique hunting technique was once used across the Plateau but is now a cultural tradition at great danger of being lost. Running a successful fire drive incorporates a suite of traditional knowledge and skills, including animal behaviour, customary burning principles, production and use of spears and spear throwers and an intimate knowledge of the local environment.

During Healthy Country Planning workshops in 2011, Rangers and elders from Manmoyi and Kamarrkawarn identified the reintroduction of fire drives as an important action under the target Biniinj Kunmayali (Customary Knowledge). In preparation for the fire drive, leading cultural expert Berribob Dangbungala Watson, who participated in fire drives as a young man, worked with children from Manmoyi and Kamarrkawarn communities to produce close to one hundred spears of different varieties, using only bush materials. Berribob, along with Warddeken rangers Terrah, Stuart and Ross Guymala worked with the young boys and men to hone spear-throwing skills and held serious discussions around behavioral expectations during a fire drive hunt with safety a key theme.

On the day of the hunt, young boys and men were painted in *delek* (white ochre) and proudly left the camp armed with their spears and *dolobbo* (traditional drop torches). Sadly the hunters were not successful in spearing any kangaroo during the fire drive event. Luckily a large group of women and young girls had worked tirelessly for hours to dig long yams, and some men had hunted a buffalo, ensuring a feast was still possible in the evening. The fire drive event was significant as it represented the achievement of an important cultural goal set by the rangers. While they hope for success in coming years, the failure to spear any kangaroo promoted discussion of a number of key land management issues for the IPA, including the impact of feral buffalo on native grasses and macropod numbers and the importance of planning for fire drives to ensure fuel loads are maintained for cultural activities.







Culture Camp at Kulnguki

At Kulnguki in July, Nawarddeken from Mok, Bolmo, Ngalngbarli, Madjuwarr and other clan groups camped together to focus on intergenerational cultural knowledge exchange. There were 62 people involved in this camp of which almost half were children who travelled in from Oenpelli and neighbouring Outstation Communities. A film crew from the United Nations University also camped with the family to record cultural activities

A main focus of this camp was the collection and preparation of traditional foods. Throughout the camp, elders worked with younger generations to collect staple foods on which their ancestors lived and demonstrated traditional cooking techniques. At the request of elder Mary Kalkiwarra Nadjamerrek rangers visited a remote site at Kumarneng on Barradj country to collect *an-kokbo*, nuts from a species of endemic and threatened cycads (*Cycas angulata*). The nuts are crushed into a pulp, toxins leached by placing the pulp in running water and then dried and made into flour and cooked into a loaf. This was a highlight of the camp as none of the children and only few adults had tasted this food before. This activity ensured a new generation of Nawarddeken now has knowledge of this unique stone country bush food.

The camp also travelled to nearby sites of cultural significance including important rock art sites and the stone spear quarry at Marlbbba in Bolmo clan country. Rangers and elders told children about the traditional trade routes of the Plateau, describing how stone from this site was quarried from shallow pits and carried west into Kakadu for trade. At the end of the camp, Mok elders led a traditional ceremony that calls on clan ancestors to increase sugarbag (wild honey), which is the totem for the clan's Mankungdjang estate.

Photos:

Facing Page: Dean Yibarbuk and children from the Kulnguki camp at an important contact art site at Djabidj bakoluy.

Previous Page Fire Drive at Ngangkan:

Left Page: Berribob Dangbungala and Derreck Nagurrurrba.

Right Page: Series of photos in preparation for the fire drive.



Material Culture Project

Warddeken’s material culture project aims to actively teach as well as document and record the production and use of cultural artefacts. The material culture project operates across Manmoyi, Kamarrkawarn and Kabulwarnamyo ranger bases in collaboration with Manmoyi Homeland School. This year, more than 120 objects of material culture were made with accompanying video footage, photos and annotation.

There was also a strong material culture focus at both the Ngangkan and Kulgnuki culture camps. Before the camp at Ngankan, rangers from Manmoyi worked with elders to build *kodbarre* or traditional shelters at the site to be used for group meetings and shade for cultural activities. Other artefacts produced throughout the course of the camps included: *kundjabarrk* (string bag), *borndok* (spear thrower) and *kunkolborn* (dilly bag tightly woven and used for collecting honey).

Photos:

Above: Spear throwing practice. Photo source Dan Maclaren

Below (left to right): Lillian Guymala; Borndok (spear thrower); Vietta Bangarr with a dilly bag of bush foods.





Manmoyi Ranger Base

Over the last few years, Warddeken have focused on building the land management capacity of Landowners based at Manmoyi outstation. Throughout 2012-2013, Landowners and Warddeken staff have been engaged in extensive planning and are working towards completion of the Dolkebulbul and Nabelan Healthy Country Plan. This has given Warddeken staff a chance to utilise their Conservation Action Planning (CAP) skills and techniques. Extensive CAP training for Warddeken staff has been supported by The Nature Conservancy and Bush Heritage Australia.

As a result of this planning, the Australian Government granted six new full-time Indigenous ranger positions to Warddeken to be based at Manmoyi outstation. This new ranger base was literally cemented with the construction of the Manmoyi Ranger base shed and office at the end of 2012 by Rangers, visiting carpenter Chris Bald and members of Manmoyi community.

Photos:

Above: Aerial photo of Manmoyi Ranger base. Photo source David Hancock.

Below (left to right): Keith Nadjamerrek and Chris Bald at Manmoyi; Georgia Vallance and Manmoyi community during Healthy Country Planning.







Anbinik

Anbinik, *Allosyncarpia ternata*, is a large and majestic forest tree endemic to the Arnhem Plateau. Anbinik grows in fire protected forests within the rugged terrain of the plateau and also as isolates scattered throughout the savanna mosaic. The protection and conservation of Anbinik dominated forest within the Warddeken IPA is a high priority for both its ecological and cultural values. Of particular importance are the isolated Anbinik stands which are often associated with ancient walking trails, rock art, ceremony places and camping sites.

Following on from their involvement in an extensive Anbinik research and monitoring project with Charles Darwin University, Warddeken was successful in accessing financial support from the Biodiversity Fund for further Anbinik work. This new project “On-ground management for degraded and at risk monsoon rainforest patches on the Arnhem Plateau” will focus on establishing a baseline ‘health report’ for 25 remnant forest patches and to restore a selection of high priority patches. In doing so, Warddeken hope to develop a well-tested monitoring system for Anbinik patches within the IPA.

Analysis of historical aerial photographs has shown that the extent of the isolated Anbinik patches has declined over time. Some patches have had up to 45 per cent canopy loss in 60 years. This is the result of uncontrolled hot and extensive late dry season fire and a loss of traditional burning regimes across the landscape and at particular sites. This year, Biodiversity Fund money has seen four high value Anbinik patches near Makkalarl, Nakarriken, Kunbambuk and Yidngarremarneng protected through installation of mineral and back burn fire breaks. These fire breaks are particularly labour and time intensive. Warddeken Rangers use brushcutters and leaf blowers to create a mineral earth break around the entire perimeter of the Anbinik forest removing all vegetation back to bare earth. With this in place, they then use drip-torches and matches to back burn away from the mineral earth break.

Photos:

Above: A managed Anbinik patch at Kunbambuk. The mineral earth break is visible around the perimeter.

Facing Page: Warddeken rangers create a mineral earth break around an Anbinik patch



Rock Art

For more than 50,000 years, Indigenous artists have been painting bim, or rock art, on the sandstone surfaces of the Arnhem Land Plateau. The Warddeken IPA contains thousands of art sites of world heritage value and the documentation and conservation of this incredible cultural inheritance is critically important to Landowners and rangers. It is estimated that only a portion of the art within the IPA has been formally documented and so an ongoing focus for rangers is to survey and record art sites.

As a result of their survey work to date, Landowners and Warddeken staff are beginning to focus more on undertaking conservation measures at important art sites at risk from degradation. In July 2012 six rangers and 10 Traditional Owners engaged in survey and conservation works at two sites threatened by fire. The focus of work during this survey was to reduce the fuel (vegetation) buildup around rock art to prevent future damage from fire. Living vegetation was also removed to prevent rubbing along ochre paint surfaces.

In early 2013 this important conservation work was further enhanced with the approval of funding from the Indigenous Heritage Program for a rock art conservation project – “Protecting the Past, Ensuring the Future”. Throughout the start of 2013 Landowners have been engaged in planning and consultation for this exciting new project.

Photos:

This Page: Ray Nadjamerek at Kundjorlomdijorlom. Photo source Keith Tuffley.

Facing Page (top to bottom): Warddeken rangers standing by a feral animal exclusion fence at Enamaraway; Keith Nadjamerek. Photo source David Hancock

Next Page Weed Management (top to bottom): Mimosa control in Miiikinj Valley; Aerial weed survey in Miiikinj Valley; Roadside spraying throughout the IPA.

Next Page Feral Animal Management (top to bottom): Water Buffalo; Buffalo exclusion fence; distributing buffalo meat and surveying for feral animal damage.



Weed Management



The Warddeken IPA and the Arnhem Land Plateau more generally, is one of the most weed free areas of Australia. However, Landowners and rangers must remain vigilant in order to keep it that way. Warddekan Rangers work with Landowners to increase awareness so that all eyes can be utilised to spot potential weed infestations. They also undertake extensive aerial weed surveys and control measures where needed.



One focus for weed control within the IPA are areas of high vehicle traffic such as around outstations, roadsides and rubbish dumps. As in other years, all outstations within the IPA were sprayed twice in 2012-2013 – at the beginning and end of the wet season.

For the second consecutive year Warddeken have continued their collaborative weed control efforts with Kakadu National Park staff tackling *Mimosa pigra* infestations in Mikginj Valley. *Mimosa* is classified as a Weed of National Significance (WoNS) and this is the only area within the IPA where it occurs. This year teams of Warddeken rangers were ferried into the valley by helicopter and applied chemical treatments to over 2000 *Mimosa* plants. Geo-referenced data of each plant was also recorded to allow for effective follow-up treatments.



In April 2013, Warddeken staff conducted helicopter surveys over 237,000 hectares concentrating on weeds in the Mikginj Valley and East Alligator River in the north east section of the Warddeken IPA. The majority of weeds were found at the boundary of Kakadu National Park in the lower reaches of Tin Camp Creek and along the base of the escarpment. There are at least four infestations of Mission grass species of around 500 hectares, but of greater concern are isolated plants found growing high in escarpment creek lines up to 4 kilometres away. During the survey, a number of individual *Mimosa* plants were poisoned, but as the seeds can survive for up to 25 years before germination, these sites will require continuous visitation into the future. The results of this survey were presented at meetings with Kakadu National Park, the Northern Land Council and mining operators within the region to establish a long term control plan.

Feral Animal Management

Water buffalo and other large feral animals are the single biggest threat to the ecological and cultural integrity of the headwater wetlands of the Arnhem Plateau. As such, Warddeken undertake strategic feral animal control across the IPA. In 2012, a large scale aerial cull was undertaken across five regions in the IPA and resulted in the removal of 735 buffalo, 60 pigs and one feral cat. Opportunistic on-ground culling throughout the year also removed another 200 buffalo and 50 pigs. Aerial observations of previously control areas indicates that there is less ongoing damage to target wetland areas and visible improvement in terms of vegetation regrowth and erosion.

Feral animal management is also a contributor to food security at the Warddeken IPA outstations as rangers prepare and distribute meat to Landowners. The distribution of meat mirrors traditional practice and creates strong support for feral animal control in the region.

In conjunction with aerial and opportunistic culling, a Community Action Grant from the Caring for our Country program has allowed Warddeken to create and test several small buffalo exclusion areas. These exclusion zones have been constructed in heavily grazed and degraded sites to clearly and visually demonstrate the impacts that buffalo are having on the landscape. In 2012 – 2013, four buffalo exclusion zones were installed at sensitive wetland sites at Water quality is considered an important indicator for wetland health. Whilst sample sizes were low, water quality testing at 13 sites in the IPA suggests that buffalo exclusion fencing improves the quality of water.

Warddeken have been working with research partners to develop methodology to establish a measure by which changes in the health of spring country can be monitored. Given that feral animals are the main threat to these wetlands, this new method looks at measuring the density of damage at key sites using high definition photography and custom software. The base mapping for this project has been done and the methodology will be trialed later in 2013.





World Indigenous Network Exchange

The inaugural World Indigenous Network conference was held in Darwin in May 2013. Over 1,200 delegates representing first nation peoples from 50 countries came together to share traditional knowledge and experience related to land and sea conservation and management.

Warddeken Chairman Dean Yibarbuk was part of a panel at the conference talking about Traditional Fire Management. Following the formal conference proceedings, Warddeken hosted delegates from Namibia and Canada who were keen to visit the IPA and learn more about the land management work that occurs in the Arnhem Plateau. A particular focus of this exchange was the interest from delegates in Warddeken’s fire management program and their involvement in the development of the WALFA project.

IPA Mentoring Award

Warddeken Senior Ranger Nigel Gellar won the Kevin McLeod IPA mentoring award in 2013 for his work within the Warddeken IPA. Nigel Gellar is a Rembarrnga man of na-bulanj subsection and has been the Senior Ranger Coordinator for Warddeken Land Management (and previously, the Manwurrk Rangers) for eight years. Nigel brings a depth of knowledge, traditional and western, to his role as Senior Ranger Coordinator and plays an enormously valuable role in the successful operation of the company, in particular the fire management program.





Conferences

2012 – 2013 was a busy year for conference and meetings with Warddeken staff travelling both nationally and internationally to represent the organisation and the work done within the IPA. A full list of conference and meeting attendance is listed below. A particular highlight was the attendance of Warddeken staff at the Conservation Action Planning (CAP) coaches rally in the United States. Along with their partners at TNC and Bush Heritage, Warddeken staff have been at the forefront of developing CAP methodology for use in north Australian Indigenous communities. In April 2013, Georgia Vallance traveled to Atlanta Georgia to share her knowledge with other conservation planning practitioners.

Conferences and Meetings attended:

People and Conservation in Land and Sea Country Conference. Society for Conservation Biology, Oceana Chapter. Darwin, Northern Territory, September 2012

CyberTracker Conference. North Australian Indigenous Land and Sea Management Alliance. Mary River, Northern Territory, October 2012.

People on Country Book Launch, Centre for Aboriginal Economic Policy Research, Australian National University. Darwin, Northern Territory, 16th October 2012.

Emerging carbon economies in northern Australia Workshop. Workshop panelist Terrah Guymala. Carbon Expo, Melbourne, November 2012.

Threatened Species Meeting. Kakadu National Park, Northern Territory, March 2013.

Conservation Action Planning (CAP) Coaches Rally. The Nature Conservancy, Atlanta, Georgia, USA, April – May 2013.

Photos:

Above: Georgia Vallance and Sarah Billis at the Gunbalanya Open Day in 2013.

Facing Page (top to bottom): Penelope Yibarbuk entertains a young girl from Canada on the WIM exchange; Nigel Gellar. Photo Source David Hancock and Glen Campbell.

Infrastructure Project

The community of Kabulwarnamyo, Warddeken's operational headquarters deep in the heart of the *Warddewardde*, is unique in many ways. Built after the 'homeland movement' of the 1970s when government support for such communities had long since faded, rangers and their families live in dwellings that have become iconic symbols of the Plateau's land management movement, the Balabbala Safari Tents. Designed as a contemporary incarnation of the traditional *balabbala* building, these safari-style tents have been built by rangers using a combination of local and imported materials.

Kabulwarnamyo's *balabbala* tents are suited to the tropical climate and to community life, however given the rapid and at times ad hoc growth of Kabulwarnamyo as both an outstation community and ranger work base, housing has been an ongoing issue for Warddeken. A focus for 2012 – 2013 has been to improve the living conditions for the rangers and other staff of Warddeken, who together with their families live permanently at Kabulwarnamyo.

In early 2013, Warddeken developed a Kabulwarnamyo Infrastructure Development Plan prepared by Melbourne based architects and planners Billard Leece on a pro bono basis. This plan was instrumental in gaining funding from the Indigenous Land Corporation to improve housing infrastructure. Improvement works began in 2013 including water infrastructure upgrades, formal reticulation of electricity to laundry and shower units, installation of benches and kitchen sinks and rubble filled water drains for living quarters, more long-drop toilets with improved ventilation and improvements to the design structure of the balabbala tents. The ability to recruit Chris Bald to work as a builder/trainer at Kabulwarnamyo also provided six rangers with on the job training in building techniques.





Aside from the direct infrastructure improvement benefits, the upgrades have resulted in a number of flow-on effects which will have a continued positive impact on the day to day operation of Warddeken Land Management. In particular, the improvements to housing infrastructure have made being on country and pursuing livelihoods more accessible, particularly for the families of Warddeken Landowners and rangers. It has also made employment as a ranger at Kabulwarnamyo a more viable and desirable livelihood option. This improved capacity to retain Indigenous rangers will ultimately lead to a more stable workforce and thus greater sustainability of Warddeken’s program and their ability to deliver best practice land management within the IPA.

Dr. Paul Burgess recently commented that Kabulwarnamyo has the highest standard of environmental health of any community he has seen in Arnhem Land.

Photos:

Above: Kabulwarnamyo outstation, Photo source David Hancock.

Below: Keith Nadjamerrek lays concrete for the workshop floor.

Facing Page (top to bottom): Ray with a new laundry and kitchen; Lindsay Whitehurst and mechanic Mike Mewett; Warddeken rangers with the new tank set up.







Karrkad-Kanjdi Trust

The Traditional Owners of the Warddeken and Djelk IPAs initiated the Karrkad-Kanjdi Trust, a conservation trust fund in 2009. The Trust was established to bring in support from private sources of funding – people who appreciate the work of Warddeken and Djelk and want to help secure, diversify and increase the resources available for natural and cultural resource management within the two IPAs.

The Karrkad-Kanjdi Trust operates independently from locally based Indigenous organisations. It is led by Indigenous and non-Indigenous Directors, including experts in natural and cultural resource management, finance and economic development. The Directors maintain a strong focus on succession planning and they are supported by advisory committees with special expertise in ecological knowledge and finance and investments. The trust welcomes gifts to the trust fund, project funding, gifts in-kind and gifts in support of operations.

In 2012-2013, Warddeken has continued to support the Karrkad-Kanjdi Trust by hosting and participating in meetings and ongoing liaising with KKT staff. In July 2012, Warddeken hosted a particularly memorable KKT Board meeting at Kulnguki deep in the heart of the stone country.

Further information on the Trust can be found at the Karrkad-Kanjdi website: <http://www.karrkad-kandji.org.au>

Photos:

Above: Sansdstone escarpment. Photo source TNC.

Facing Page: Alyurr, Leichhardts Grasshopper.

Warddeken Staff

Expert Consultants: Mary Kolkiwarra Nadjamerrek, Mary Naborlhborlh, Ruby Bilidja, Deborah Nabarlambarl, Laura Runggawanga, Josie Maralngurra, Jack Djandjomerr, Timothy Nadjowh, Wurdib Nabalwad, Leonie Guymala, Leanne Guymala, Lillian Guymala

CEO: Peter Cooke

Financial Controller: John O'Brien

Operations Manager: Jake Weigl

Administration, Research and Training Manager: Georgia Vallance

Senior Ranger Coordinator: Nigel Gellar

Senior Ranger: Freddy Nadjamerrek

Senior Ranger: Dean Yibarbuk

Senior Ranger: Terrah Guymala

Fulltime and permanent part time 'Working on Country' Rangers: Berribob Dangbungala Watson, Joelene Miller, Jenny Nadjamerrek, Sylvia Ragurk, Elizabeth Nabarlambarl, Margaret Guymala, Keleasha Ogden, Joel Naborlhborlh, Bobby Maralngurra

Casual Rangers: Stuart Guymala, Manoah Nawilil, Mitchell Nabarlambarl, Gavin Namarnyilk, Darius Maralngurra, Keith Nadjamerrek, Lindsay Whitehurst, 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, James Guyula, Elkanah Dullman, Emmanuel Namarnyilk, Graham Namarnyilk, Zacaria Namarnyilk, Christopher Ngabuy, Zebedee Ngabuy, Leslie Ngabuy, Nicodemus Nayilibidj, Willie Nabalwad, Justin Nayilibidj, Serina 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, Toni Whitehurst, Jalisa Koimala, Martha Cameron, Cecily Murrukula, Marlene Badwana, Justina Namarnyilk, Lorna Nabalwad.

Other valuable help from: Alys Stevens, Chris Bald, Jeremy Freeman, Mike Mewett, Murray Garde, Paul Josif, Michael Carter, Daryl Wesley, Troy Mallie, Glen McLaren, Calvin Murakami, Anna Pickworth, the Djelk Rangers, Stuart Cowell and KKT, Dom Ferguson, Alex "Batman" Ernst, Jabiru NLC, Ken and Jenny at Jabiru Foodland, Emma Ignjic and David Hancock.

Warddeken Land Management Limited

ABN 12 128 878 142

Statement of Financial Position

30 June 2013

Warddeken Land Management Limited

ABN 12 128 878 142

Extract from the Financial Statements

For the year ended 30 June 2013

		2013	2012
		\$	\$
Grants revenue		2,275,679	1,817,549
Other income		67,231	92,345
Employee benefits expense		(1,027,222)	(888,210)
Depreciation, amortisation and impairments		(111,330)	(74,039)
Hire of plant and equipment		(297,510)	(349,266)
Repairs and maintenance		(166,154)	(157,556)
Other expenses		(614,564)	(562,777)
(Loss) / income before income taxes		126,130	(121,954)
		2013	2012
	Note	\$	\$
ASSETS			
Current assets			
Cash and cash equivalents	2	433,189	436,160
Trade and other receivables	3	11,389	26,811
Total current assets		444,578	462,971
Non-current assets			
Property, plant and equipment	4	680,484	486,896
Total non-current assets		680,484	486,896
TOTAL ASSETS		1,125,062	949,867
LIABILITIES			
Current liabilities			
Trade and other payables	5	207,346	83,901
Borrowings	6	46,008	108,802
Employee provisions	7	31,101	33,369
Other Liabilities	8	5,204	14,522
Total current liabilities		289,659	240,594
TOTAL LIABILITIES		289,659	240,594
NET ASSETS		835,403	709,273
EQUITY			
Retained earnings		835,403	709,273
TOTAL EQUITY		835,403	709,273

Warddeken Land Management Limited

ABN 12 128 878 142

Independent Audit Report to the members of Warddeken Land Management Limited

Independent auditor's report to the members of Warddeken Land Management Limited

Report on the Extract from the Financial Report

We have audited the accompanying Extract from the Financial Report of Warddeken Land Management Limited, which comprises the statement of financial position as at 30 June 2013 and the income statement for the year ended 30 June 2013. The Extract from the Financial Report does not contain all the disclosures required by the Australian Accounting Standards.

Directors' Responsibility for the Financial Report

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view and have determined that the basis of preparation described in Note 1 to the financial report is appropriate to meet the requirements of the *Corporations Act 2001* and is appropriate to meet the needs of the members. The directors' responsibility also includes such internal control as the directors determine is necessary to enable the preparation of a financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the Extract from the Financial Report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. Those standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance about whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation of the financial report that gives a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

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

Independence

In conducting our audit, we have complied with the independence requirements of the *Corporations Act 2001*. We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of Warddeken Land Management Limited, would be in the same terms if given to the directors as at the time of this auditor's report.

Warddeken Land Management Limited

ABN 12 128 878 142

Independent Audit Report to the members of Warddeken Land Management Limited

Opinion

In our opinion the Extract from the Financial Report of Warddeken Land Management Limited is in accordance with the Financial Report of Warddeken Land Management Limited, and is in accordance with the *Corporations Act 2001*, (where applicable) including:

- (a) giving a true and fair view of the company's financial position as at 30 June 2013 and of its performance for the year ended on that date; and
- (b) complying with Australian Accounting Standards and the *Corporations Regulations 2001*, where applicable.

Basis of Accounting

Without modifying our opinion, we note that the report is an extract from the Financial Report of Warddeken Land Management Limited which is prepared for the purpose of fulfilling the directors' financial reporting responsibilities under the *Corporations Act 2001*. As a result, the financial report may not be suitable for another purpose.

Perks Audit & Assurance

PERKS AUDIT & ASSURANCE

180 Greenhill Road

Parkside

South Australia 5063

P Hill

PETER J HILL

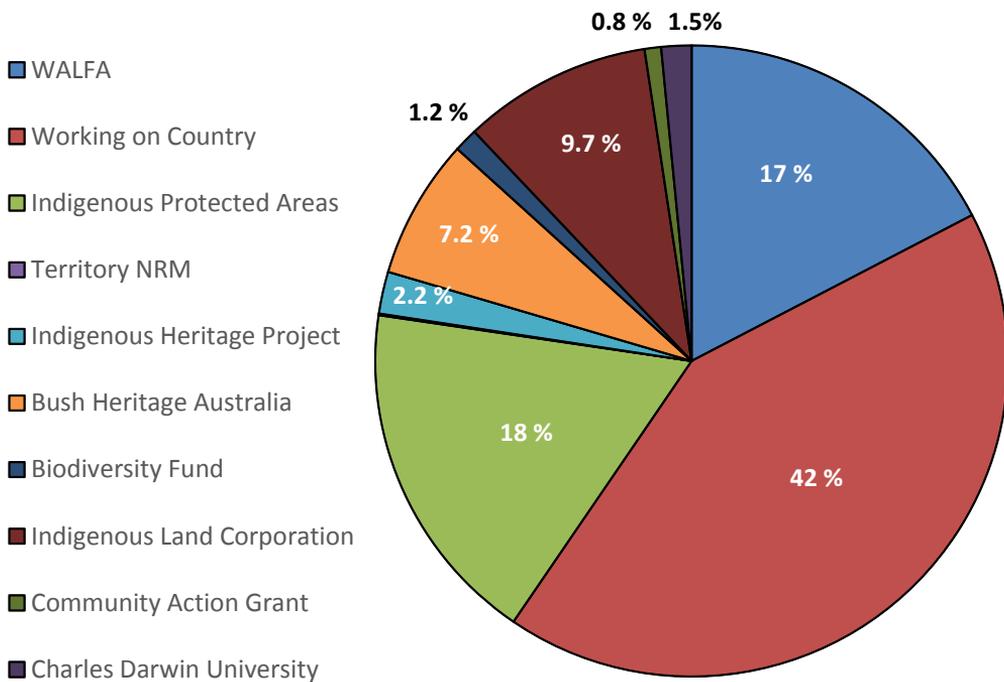
Partner

Registered Company Auditor

Dated this 30th day of September 2013



Our Funding Sources in 2012 - 2013

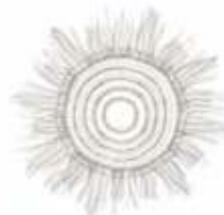
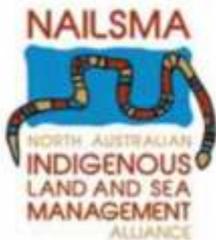
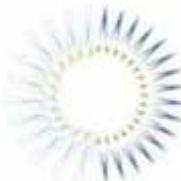


Warddeken Land Management is supported by the Australian Government through funding from Caring for Our Country, the Biodiversity Fund of the Clean Energy Future Initiative and the Department of Sustainability, Environment, Water, Population and Communities.

Warddeken also acknowledges and thanks many other supporters and project partners including:



Australian Government





Kodjan Ngaldjordi 1929 - 2012

Warddeken pays tribute to Kodjan Ngaldjordi, one of the last senior women of the Warddewardde. Kodjan lived her entire life in the bush and was instrumental in establishing the Manmoyi and Kamarrkawarn ranger bases. She worked closely with the Rangers in the final years of her life and her knowledge, wisdom and passion for the Stone Country will live on in the work of the Rangers.

Note: Kodjan Ngaldjordi's name and photograph are used with permission of the families. Warddeken directors and staff extend continuing sympathy to all those affected by her passing.

Photos:

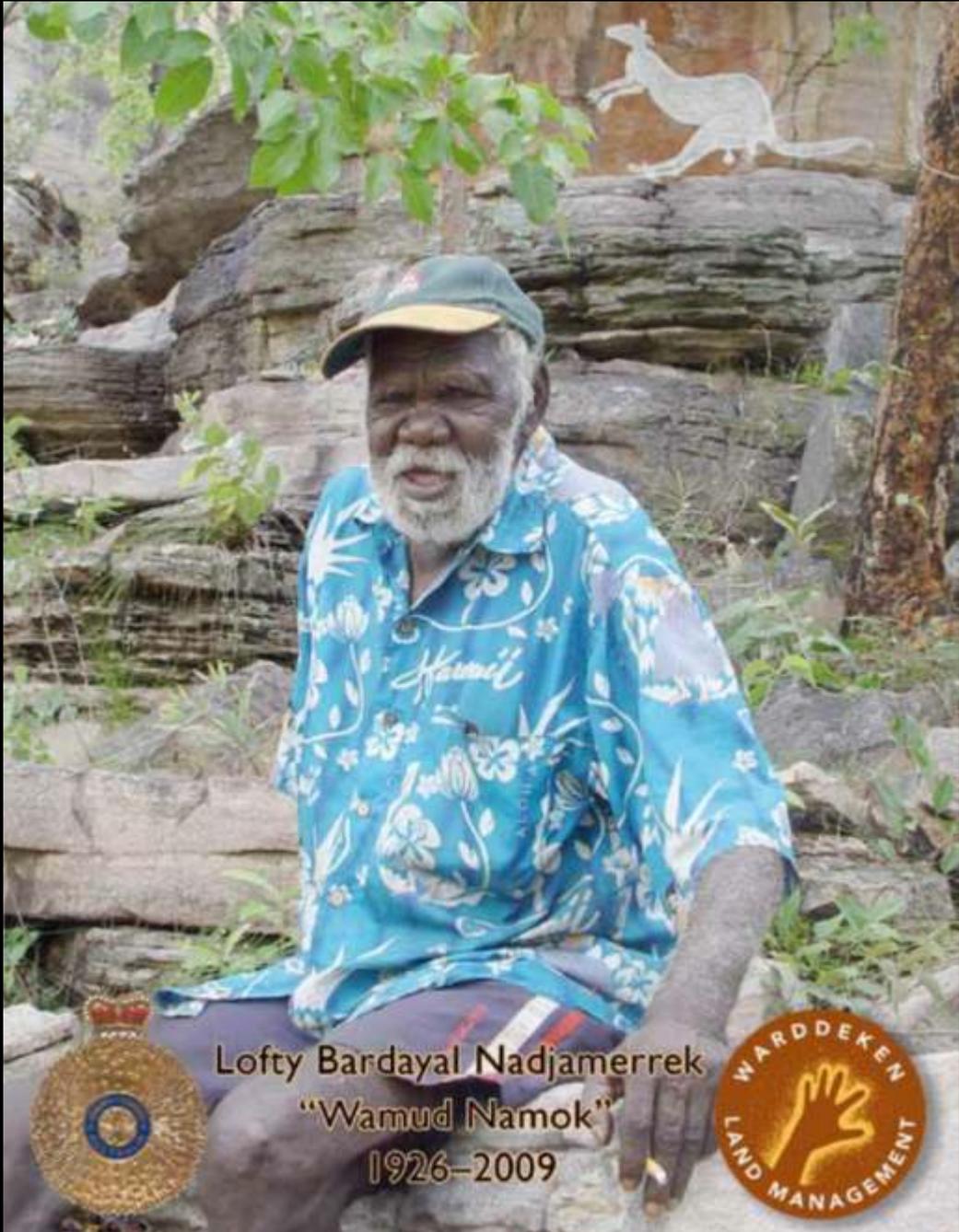
Above: Kodjan Ngaldjordi with Amy Namarnyilk.

Facing Page: Wamud Namok.

Page 38: Arnhem Land Sandstone Shrublands.

Back Cover: Young Leslie Phillips and cultural advisor Berribob Dangbungala during the Ngangkan kangaroo fire drive.

HIS SPIRIT LIVES WITH THOSE WHO CARE FOR COUNTRY



Yakkake Wamud Na-mok, djorrbayeng, ngundi-manjbun rowk bu kan-bukkabukkang ngadberre an-garre na-warddeken, kan-kangemang ngadberre Wamud. Munguyh-munguyh arri-djalbengkan ngudda. Kun-malng ke ka-rrurndeng 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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Ngarri-bolknahnan kun-red
Looking after country together