CLC RANGER PROGRAM REPORT

CENTRAL LAND COUNCIL

Supplement to the CLC Annual Report

2018–19

CENTRAL LAND COUNCIL

CONTENTS

Molly Napurrurla Tasman prepares a goanna and a black-headed python in the Northern Tanami Indigenous Protected Area.

FOREWORD

The Central Land Council is a big, important organisation and as its chair I recognise the knowledge of the past delegates and the important work they have done, work that I intend to continue.

One of my first meetings as chair was with Australia's first Aboriginal cabinet minister and Minister for Indigenous Australians, Ken Wyatt, in June in Darwin. Mr Wyatt was really supportive of what our CEO, Joe Martin-Jard, policy manager Josie Douglas and I said to him. I think he understands why we need more people working in the bush to look after their country for future generations.

We have a lot of knowledge about our country and our affairs and we deserve respect.

Our ranger program is a good example of how we use our knowledge to protect and care for our country, as we have done from time immemorial. Ranger work benefits everybody by protecting our endangered species, managing weeds and feral animals, burning country for carbon abatement and ensuring that we can thrive on our country.

The program needs secure funding for many years to come so we can plan ahead and offer meaningful work on country to more of our young people in more places. I will work hard to achieve this.

Sammy Wilson
Chair
Central Land Council

I am grateful to the members of the Central Land Council for the opportunity to lead the CLC and fortunate to have been entrusted with the leadership of such a highly regarded organisation. At the first council meeting I attended, members asked for more real jobs for young people in their communities. Our popular ranger program has been very successful in creating jobs with real wages and career paths in a dozen communities but there is so much scope to do more. Our rangers are the best people to manage their country for everyone's benefit and are critical to maintaining precious cultural and ecological knowledge.

As I told them when retired CLC director David Ross and I attended the annual ranger camp at Glen Helen together, I will build on his legacy to strengthen our ranger groups and expand the program to remote communities that have been wanting to set up their own ranger teams for a very long time now.

Negotiations for long-term funding of our ranger program and a strategic plan to roll it out to more communities are very high on my agenda. I look forward to working closely with ministers Ken Wyatt and Sussan Ley to deliver an expanded and secure ranger program in the interest of our constituents and the nation.

Joe Martin-Jard
Chief Executive Officer
Central Land Council

PROGRAM OVERVIEW 2018–19

The CLC's Ranger Program is a structured, community-based land management program that includes 12 individual ranger groups, see figure 3 on page 6.

Nine years of consolidated funding from the Department of Prime Minister and Cabinet's (PM&C) Indigenous Advancement Strategy (IAS) and the Indigenous Land and Sea Corporation's (ILSC) Real Jobs programs have allowed our 12 ranger groups to manage cultural and natural resources on Aboriginal land. Four groups manage indigenous protected areas (IPAs) that contribute more than 195,000 square kilometres to the national reserve system.

From their base in Mutitjulu, the CLC's newest team, the Tjakura Rangers, expanded their footprint in the Katiti Petermann IPA and established strong working relations with the Kaltukatjara ranger group (based in the west of the IPA) and the Ananngu ranger group (based in the Angas Downs IPA). The high value that Aboriginal communities place on the program is evident from the large numbers of people who apply for the limited number of ranger jobs, and by the enthusiasm of traditional owners who direct and oversee the work of rangers. This critical collaboration strengthens intergenerational knowledge exchange and community engagement.

We train and mentor our rangers and provide career pathways, both within the program and on to other employment. The skills and capacities that rangers develop through the program are transferable to other employment and leadership roles.

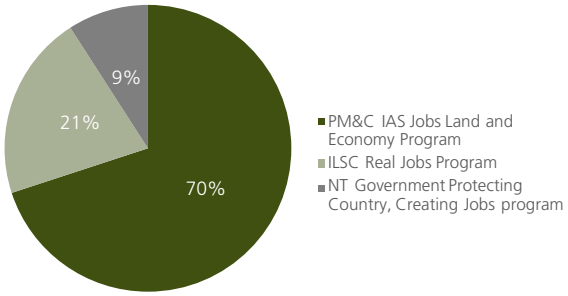
Tjuwanpa ranger Malcolm Kenny on the ANZAC ride.

This year, of our 99 rangers, nine were employed fulltime, 68 parttime and 22 as casuals. Twelve co-ordinators and nine other staff support the ranger groups.

Demand for ranger jobs and the establishment of new ranger groups remains high and we continue to advocate for the expansion of our successful program.

FUNDING

FIGURE 1. RANGER PROGRAM FUNDING, 2018–19



Ranger jobs are secure until June 2021, thanks to the IAS and the ILSC. The effectiveness, recruitment and retention of rangers depend heavily on infrastructure that is compliant with workplace health and safety regulations, such as co-ordinator housing, ranger offices and workshops.

The NT Government's $900,000 Aboriginal ranger grant funded workplace improvements, such as asbestos removal, and additional sheds and vehicles. The grant also paid for the grading of firebreaks and of access tracks to significant sites and outstations, and for the development of land management plans for several land trusts.

SIGNIFICANT ACTIVITIES

CROSS-BORDER COLLABORATION

The CLC became a member of the newly incorporated Indigenous Desert Alliance (IDA) in 2018–19, a coalition of indigenous land management organisations in desert regions of Western Australia, South Australia and the Northern Territory. The alliance supports Aboriginal rangers across the region to achieve cultural, environmental, economic and social benefits.

Two CLC rangers serve as directors on the alliance's inaugural board and CLC staff attended its annual conference in Perth and the Species of the Desert Festival near Mulan.

Around 40 CLC rangers and support staff attended the Species of the Desert Festival at Paruku Lake (Lake Gregory) near Mulan in Western Australia. Hosted by the Paruku and Kumirrki rangers and the Kimberley Land Council, this three-day IDA event attracted 240 participants from 23 different groups from across the NT, WA and SA.

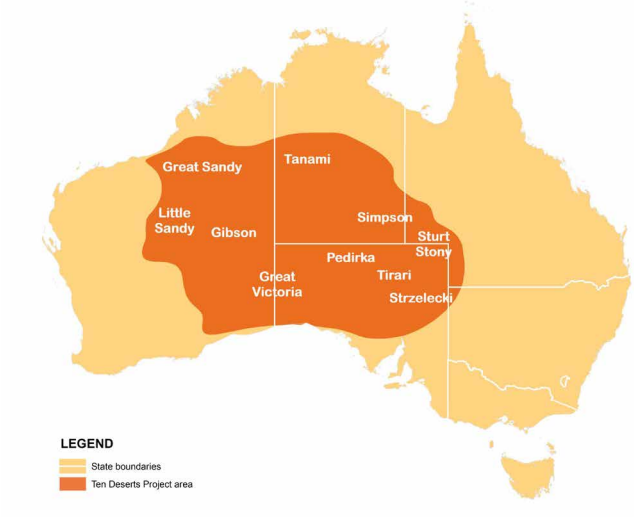
The rangers learned from one another about the management of threatened and significant species. The Paruku Rangers shared photos and audio of night parrots on their IPA and explained how they are managing fires and feral cats threatening the parrots.

Our rangers talked about how they are monitoring and managing threatened species such as the bilby, black-footed rock wallaby, and great desert skink.

CLC participants at the Indigenous Desert Alliance annual conference.

Katiti Petermann IPA co-ordinator Tracey Guest and Tjakura ranger Jacob Braeden handle a great desert skink, or *tjakura*, at the Species of the Desert Festival.

FIGURE 2. THE 10 DESERTS PROJECT AREA



Each ranger group worked on a map marking potential habitat of endangered species, fire scars, waterholes and other areas of environmental interest. Traditional owners and rangers for Paruku had been working on a larger map for many years and explained how they use it.

"They know which areas of their country they can go and look for things. It was short and simple – they know their land," Joe Palmer, of the Ltyentye Apurte Rangers, said.

Threatened Species Commissioner Dr Sally Box described the festival as "a fantastic opportunity for indigenous rangers to get together and talk about threatened species and how they're protecting them. Many of these species occur almost exclusively on indigenous owned or managed land so the work that indigenous rangers do to protect these species is super important."

10 DESERTS PROJECT

We are also a member of the 10 Deserts Project, an indigenous-led partnership launched in 2018 that helps traditional owners to look after 2.8 million square kilometres across all of Australia's 10 deserts.

The project works across the world's largest connected network of protected areas and indigenous-managed lands.

Other project partners are the Central Desert Native Title Services, Kimberley Land Council, Nyangumarta Warrarn, Natural Resources Alinytjara Wilurara, IDA, Arid Lands Environment Centre, Nature Conservancy and Pew Charitable Trusts. The Desert Support Services (DSS) administers the project with financial support from the BHP Billiton Foundation.

In early 2019, we supported emerging ranger groups at Kintore (Haasts Bluff Aboriginal Land Trust) and Arlparra (Angarapa ALT) by consulting with traditional owners about ranger work plans.

The Kintore group and traditional owners visited an important site to facilitate knowledge transfer and site assessment. Traditional owners and the Utopia rangers conducted seven site visits to assess impacts to the sites' cultural values. Residents of both communities want sustainable long-term support for their rangers.

Rangers and traditional owners have asked for many years for additional opportunities to learn from each other. The rangers want to balance mainstream education and training with learning about the country from senior Aboriginal people. After a CLC workshop with a group of traditional owners and rangers supported the concept of peer-to-peer learning, we initiated two projects to support intergenerational knowledge transfer with Tangentyere Land and Learning. Tangentyere engaged students from Kintore school and Utopia with rangers and senior traditional owners in activities such as identifying animals and their Aboriginal names.

DRONE TRIAL

We started a drone pilot project to explore how drones can help rangers map, burn and survey land and track animals. Drone operations training saw rangers and co-ordinators become more confident with practice. The training sessions covered drone safety rules and regulations, assembly, take-off, landing, finding destinations and positioning the drone to take photos and videos. Drones can save rangers a lot of time and energy when looking for sacred sites and other places.

They also reduce safety risks during controlled burns by providing aerial fire images. Little wonder the feedback from the pilot project so far has been positive, with rangers very impressed by the capabilities of the drones.

AWARDS

- **Rio Tinto Indigenous Land Management Award**: Finalist Josephine Grant, Anmatyerr Rangers. National Landcare Conference, October 2018.
- **Ranger of the Year Award**: Helen Wilson, North Tanami Rangers. NT Natural Resource Management Conference, November 2018.
- **Environment and Conservation Award**: Murnkurrumurnkurru Rangers, June 2019.

Rangers Kelvin Kopp (left) and Malcolm Hayes from the Ltyentye Apurte Rangers learn how to navigate a drone.

Ranger portrait: Clayton Namatjira

My surname means white ant fly. It is my family totem and it comes from the western MacDonnells area. I am Western Arrarnta and Warlpiri. My father's family comes from the western MacDonnells west of Alice Springs, and on my mother's side from Yuendumu, northwest of Alice Springs on the Tanami Road.

As a young man I was working as a CDEP [the disbanded Community Development Employment Program] participant on my uncle's outstation, northeast of Tennant Creek towards the Queensland border. It was my auntie who told me to sign up to be a ranger in Tennant Creek. It was still with CDEP and the work was slow; I got bored and left in 2004. After my first ranger experience I went back to normal CDEP for a while, doing a construction course.

I rejoined the Muru-warinyi Ankkul Rangers in 2010, now a 'real' ranger group with a proper name and lots of work. After working as a casual, then as a permanent parttime ranger for three years, I was promoted to senior ranger in 2012. I stayed in that position till 2018.

During this time, I did a lot of training. It took me eight years to get all the certificates for conservation and land management.

As senior ranger I had responsibility for the male rangers and if the co-ordinator was on leave, the senior ranger for the women and I were in charge of the rangers and all the work. That gave us both the opportunity to show our leadership skills. I enjoyed the experience and it gave me an insight into what it meant to be a ranger group co-ordinator.

I learnt a lot about being a ranger and the role we play in our community. It makes us proud to know that we have a community supporting us and encouraging us to do better.

We regularly met with traditional owners from Tennant Creek and surrounding communities – without their support it would be impossible for us to do our job. They told us how to care for the country and we listened to their stories and concerns; for example, they told us about their problems with feral animals – I was surprised at the amount of damage these animals do to waterholes.

In 2017, an opportunity came to work on the Northern Gas Pipeline with one of the major contractors. I took leave without pay from CLC to work as a fauna handler. I was very fortunate to work with two renowned reptile conservationists. I learnt a lot of reptile names and even the Latin names from these two very knowledgeable old fellas, Gerry Swan and Steve Wilson.

When that project finished, I worked for the Myuma Group, a road construction company in Mount Isa. This was a big change to my daily routine because I had to get up at four a.m. and finished at six p.m. for three months. I worked for four weeks and then had one week off for family time. I used the time off to catch up with family in Darwin.

After this, I worked for an organisation which deals with the mental health issues of Aboriginal people. I checked on clients to see how well they were doing, sometimes taking them out of town on day trips. I tried to help them with the issues they faced in their day-to-day life and talked about how they could move on with their life.

In November 2019, I successfully applied for a ranger program support officer position. I am now back at CLC and my region is the northeast – Ti Tree and Tennant Creek. I am really looking forward to working with the Anmatyerr Rangers and Muru-warinyi Ankkul Rangers!

Clayton Namatjira talks to the ABC's *PM* program about cultural burning.

WHERE WE WORK

We are the eyes and ears of the bush, responding to natural and cultural resource management issues across most of the CLC region — half of the Northern Territory. Traditional owners identify priority areas to use the CLC's limited resources wisely and develop projects that best meet their aspirations for their country.

There are never enough jobs for all the people who want to work as rangers and many communities are seeking to establish ranger groups where they currently do not exist.

FIGURE 3. WHERE RANGERS WORK

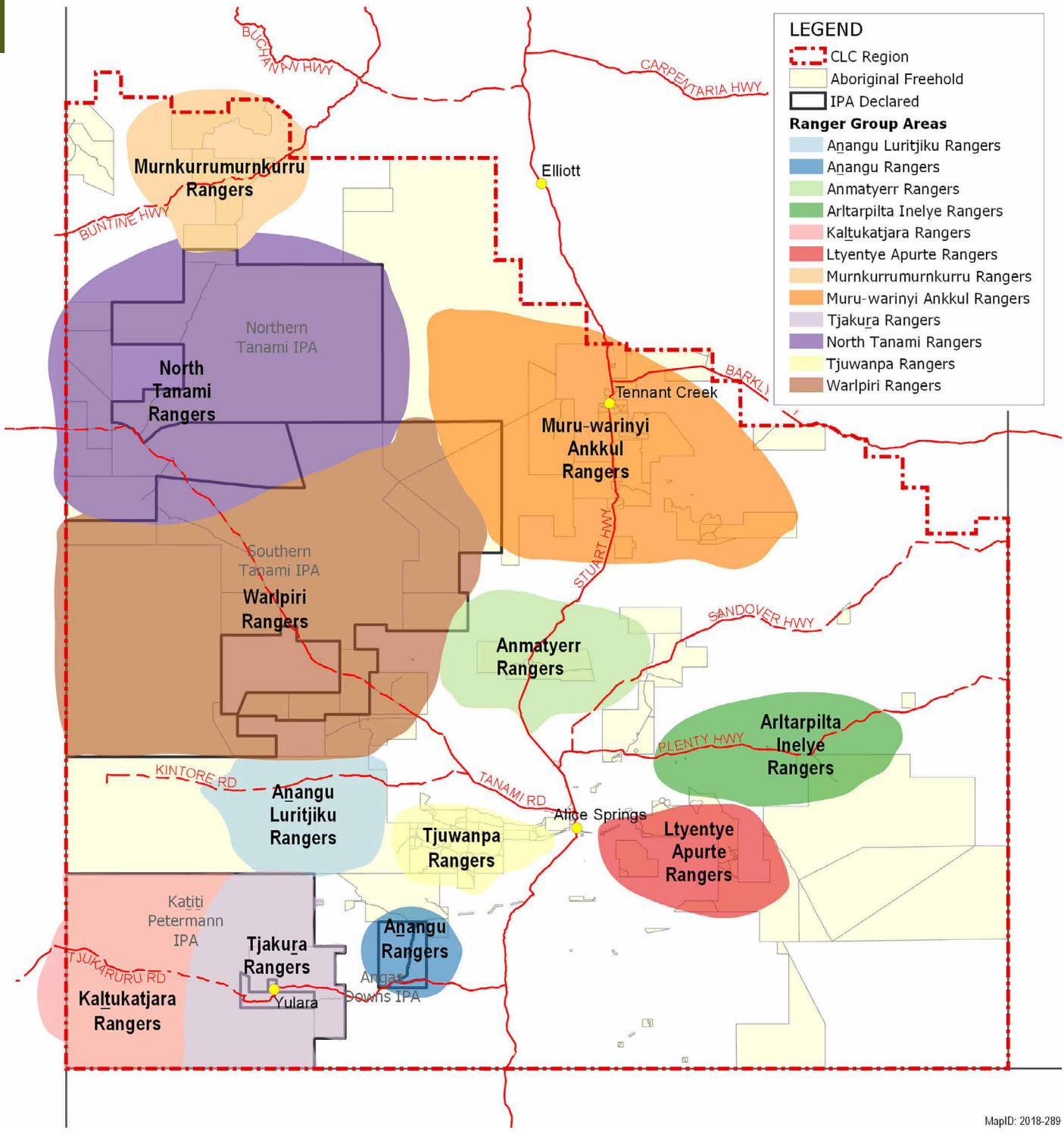


Table 1. Ranger groups and where they work

Ranger group	Area of operation
Anangu Luritjiku	Angas Downs IPA, Imanpa
Anangu Luritjiku	Papunya and surrounding Haasts Bluff ALT
Anmatyerr	Ahakeye ALT (Ti Tree) and wider Anmatyerr region
Arltarpilta Inelye	Atitjere, Huckitta Station and surrounds
Kaltukatjara	Kaltukatjara (Docker River) and Western Katiti–Petermann IPA
Ltyentye Apurte	Santa Teresa ALT and surrounds
Murnkurrumurnkurru	Daguragu ALT and surrounds
Muru-warinyi Ankkul	Tennant Creek region
North Tanami	Lajamanu and Northern Tanami IPA
Tjakura	Mutitjulu, Eastern Katiti–Petermann IPA, collaboration with Uluru – Kata Tjuta National Park
Tjuwanpa	Hermannsburg ALTs and adjoining national parks
Warlpiri	Yuendumu, Nyirrpi, Willowra and Southern Tanami IPA

RANGER WORKS

Ranger employment develops not only individual rangers but also the capacity of traditional owners to develop and oversee ranger work plans. Traditional owner/ranger advisory committees and IPA management committees enable traditional owners to incorporate their own land management aspirations into the ranger program. One way to build on this capacity is through commercial contracts for our rangers that generate income for the expansion of the ranger program, an initiative we plan to call Ranger Works.

We have used funding from the NT Government to contract Social Ventures Australia to explore the current and potential market for income generation through fee-for-service work and other commercial opportunities for rangers.

The contractor reported that current market opportunities are modest but do offer diverse additional benefits for rangers. The report identified the niche tourism sector and environmental services as having the most potential for growth.

The Tjuwanpa Rangers assisted the NT Government to develop plans for the Red Centre Adventure Ride, a mountain bike track that will run the length of Tjoritja/West Macdonnell National Park.

FERAL ANIMAL EMERGENCY

Below-average rainfall since 2017 and record temperatures have kept feral animal management staff busy. The lack of food and water for animals has put enormous pressure on the country. Feral animals congregated around the few remaining water sources and often perished.

Table 2. Feral animals removed, 2018–19

Location	Camels	Horses	Donkeys	Cattle	Total
Central Desert ALT	1167	19	3	256	1445
Haasts Bluff ALT	429	77	–	–	506
Mulga Bore Outstation	–	153	–	–	153
Ntaria area	188	1864	40	4	2096
Petermann ALT	427	24	–	–	451
Pmere Nyente ALT	–	220	–	327	547
Santa Teresa ALT	–	54	–	–	54
Wirliyjarrayi ALT	–	–	–	73	73
Yalpirakinu ALT	58	133	–	372	563
Yuendumu ALT	2	222	–	167	391
Total	**2271**	**2766**	**43**	**1199**	**6279**

Elder Henry Cook drinks from Kamira spring in 2004 . . .

. . . by 2019 Kamira was severely damaged by feral animals.

Rangers Terence Abbott and Mick Marshall from the Anangu Luritjiku Rangers install fencing to protect Ilpilli spring.

Case study:
Dead feral horses: "It was horrible."

Deep in the Tanami Desert there is a special water place called Kamira. The spring is part of a *ngapa* (water) songline and was once an important meeting place for people from the Northern Territory and Western Australia. Kamira flowed all year round and was a precious source of fresh clean water feeding a small creek that flowed into a large salt lake during the Wet.

"Kamira my country, used to walk around everywhere when I was a young fella. No whitefella then," said 102-year-old Henry Jakamarra Cook, one of the last elders who grew up living off the land. "Everyone walking around Kamira to get *ngapa*. Everyone come in, east, north, everyone. Big mob." Mr Cook remembers "chasing goanna and kangaroo. Spring water, good country that one."

Kamira is now a muddy wasteland, trampled by feral cattle after two exceptionally dry seasons and a record-smashing heatwave.

"It makes me feel sad to see it like this," said CLC ranger and traditional owner for Kamira, Silas Jampijinpa Ross.

Before the CLC organised an emergency cull of more than 1,400 feral cattle, horses, camels and donkeys near Lajamanu in June 2019, thirsty and starving animals congregated around the spring and other water sites. They ate some plants and trampled the others, compacting the soil so new plants couldn't grow. Native animals struggled to compete for the remaining muddy water.

While Mr Ross and the other North Tanami rangers were working to restore and protect Kamira, their colleagues in Ltyentye Apurte (Santa Teresa) found themselves at the centre of international media attention when they discovered around 100 dead and starving horses at Apwerte Uyerreme, the normally reliable waterhole south of Alice Springs. It had dried out during the hottest NT summer on record and the driest in 27 years. Ranger Joe Palmer said residents could not remember a time when there were so many wild horses in the community, nor could they recall a similar mass death of brumbies.

The CLC immediately responded to the gruesome discovery with an emergency cull, one of the first in a series that removed almost 6,300 feral animals from Aboriginal land across the region before the summer was over. The Indigenous Land and Sea Corporation kicked in funding at short notice, so did the 10 Deserts Project. Working closely with shooters from the NT Parks and Wildlife Commission the CLC reduced animal suffering while the search for sustainable solutions continued.

On a hot and dusty day in March, Ltyentye Apurte rangers had the unenviable task of removing the horse carcasses from Apwerte Uyerreme as requested by the traditional owners.

"Some of them were on the bank and probably 60 horses in the waterhole," Joe Palmer told the ABC.

"We had to pull them first so that the backhoe could pull them out of the creek," his colleague Malcolm Hayes added. "It was horrible. There was too much smell."

It is little wonder that preventing a repeat of the tragedy is high on everyone's agenda. Many traditional owners think the best prevention is to muster feral horses during good years, when they are fat and healthy.

This social media image of the mass death of feral horses at Ltyentye Apurte made international headlines in early 2019. (Photo: Ralph Turner)

Ltyente Apurte Rangers helped clean up the waterhole following the horse deaths.

Finding a market for brumbies is challenging at the best of times but it is far too late when the animals are close to death. Mustering and other preventive solutions, such as regular aerial surveys to monitor feral animal numbers, require consultations with many traditional owner groups, careful planning and ongoing funding for helicopters. None come cheaply.

Lucky for Ltyentye Apurte and three other regions in Central Australia, the NT Government agreed to fund the CLC to develop healthy country management plans. In May 2019 it invested $200,000 in planning with traditional owners around Ltyentye Apurte, Ntaria, Tennant Creek and Ti Tree. Over the next two years, the CLC will work on the plans with traditional owners. One of the questions it will put to them is: What is the best way to manage feral populations on their country?

RANGER GROUP ACTIVITIES 2018–19

ANANGU RANGERS (ANGAS DOWNS)

The CLC's Anangu Rangers delivers cultural and natural resource management for the Angas Downs IPA in the southwest of the CLC region by implementing biodiversity surveys, weed and feral animal control, fire management and rock art conservation. The group is based in Imanpa and works with traditional owners and neighbouring pastoralists to also maintain fences that protect water places and sites of cultural significance.

Project Spotlight: Feral animal emergency

At the end of January, dams in the west of the IPA evaporated and herds of feral horses, cattle and camels moved east in search of water. We set camera traps to capture this. Horses on Angas Downs learned how to break plastic agricultural pipes with their hooves, and cattle and camels followed them to drink the gushing water. At the Wilbia ranger camp, herds of animals damaged buildings and infrastructure, and pulverised the campground into dust.

Feral animals search for water at Wilbia.

Little Yarra Steiner School students lent rangers a hand at Wilbia.

Even worse, well-fed and well-watered heifers and young cows began to die mysteriously in the campground. The rangers and pastoral development officer investigated and found that animals were licking discarded car batteries at the old tip near the camp. We placed three types of lick block near a waterpoint to the north of the camp and then monitored. The cows licked the phosphorus block but ignored the high sulphur and protein blocks. This may indicate that a phosphorous deficiency drove them to lick the car batteries. Some other toxin may have caused the cattle deaths; however, the tip was the likely source.

A quick, cost-effective solution was needed. After research, we installed solar-powered electric fencing around the tip. This was effective immediately. We then installed star pickets around the camp to support an electric cord and solar energiser just as students from Little Yarra Steiner School in Melbourne visited us. It is amazing how quickly 30 keen young people can install clips and run a cord!

The rangers plan to install permanent fences, but the temporary electric fence was cost-effective in an emergency and is applicable to other emergencies as they arise.

Electric fences now keep animals out of the ranger camp at Wilbia.

ANANGU LURITJIKU RANGERS (PAPUNYA)

The Papunya-based Anangu Luritjiku Rangers delivers cultural heritage projects, feral animal management, weed control, biodiversity surveys and monitoring activities on the eastern half of the four-million-hectare Haasts Bluff Aboriginal Land Trust, around Papunya, Ikuntji (Haasts Bluff) and Mt Liebig. The land trust contains the internationally significant Talipata Springs wetland and is home to threatened species such as the mulgara, great desert skink, Slater's skink, princess parrot and the black-footed rock wallaby. It is part of a corridor of IPAs and Aboriginal land linking the NT's tropical northwest and its desert southwest.

Project Spotlight: Protecting water for native animals

Most waterholes in our region have been dry for a long time because of a lack of rain but a number of significant springs remain important water sources for native animals. A couple of springs we visit regularly include Ilpilli, between Mt Liebig and Kintore to the west, and Kumulpa at Karrinyarra (Mt Wedge). This year, both springs were under huge pressure from thirsty camels, and by last summer they were dying on top of each other at the springs, leaving the water too polluted for native animals to drink.

We had the horrible job of removing the rotting carcasses from the spring areas. They were removed by bobcat and then burnt. It's not a great job but it had to be done.

At Ilpilli, we set up portable panels around the springs to stop the camels from dying on top of the spring outlet. The panels allow native wildlife to drink clean water inside the enclosure while the camels get the overflow from water points we constructed on the outside.

It has been effective and the area already looks much better. We plan to put up a more permanent fence at both the Ilpilli and Kumulpa sites and widen one turkey's nest dam. Hopefully we will get some good rains in the near future to give the springs a good flush out.

We also discussed monitoring water inside and outside the fences as part of annual surveys with a specialist water doctor. The protection and monitoring of these desert springs will continue to be an important part of annual work plans.

Boyd Elston watches on as Preston Kelly clears carcasses from Kumulpa with a bobcat.

At Ilpilli West spring, panels installed by rangers are now keeping camels out.

Ranger Terence Abbott burning camel carcasses.

ANMATYERR RANGERS

From its base at Ti Tree, the Anmatyerr Rangers protects culturally significant water places; manages weeds, fires and feral animals; educates the community; maps country and records indigenous ecological knowledge. The group works mostly on the Ahakeye Aboriginal Land Trust.

Project Spotlight: Using fire to protect bushtucker

In May, we joined Tennant Creek's Muru-warinyi Ankkul Rangers and traditional owners to undertake controlled burns at Adelaide Bore, 70 kilometres east of Ti Tree on Ahakeye ALT. We learned about fire management from our colleagues while they learned how we use fire and burning to protect *antyalkenh*, the giant sweet bush potato or pumpkin, an important Anmatyerr plant. It only grows here, so it's important to protect it from the impacts of fire and cattle.

Antyalkenh habitat has been increased with strategic burns.

Our traditional owner ranger advisory committee requested the burns in 2018 to protect sacred sites and infrastructure from wild fire and promote buck tucker, bush medicine and to create access to hunting grounds.

We met with the traditional owners in the morning on the day of the burn. They checked the weather forecast, because we had to burn under calm conditions to prevent fire spreading in to the neighbouring pastoral leases. We decided to burn in the afternoon when it would be warm and dry enough, but not too windy.

We planned where to burn around the community and how to do it safely, backed up by fire trailers.

We taught the traditional owners to use a drip torch and record information on our tablets with Cyber tracker software. In return, they showed us sacred sites, and told stories of their country and how they used to live.

They also showed us bush pumpkin and passed their knowledge on to the younger people on site.

The *antyalkenh* needs open ground to grow. We planned to burn the grass around it but there wasn't much grass due to the drought. We need to come back next year to do more protection burning if required, and to check on the conditions of the pumpkins. We also want to find ways to improve the very overgrown access track to the site without damaging it.

Rangers undertaking controlled burns near Adelaide Bore, east of Ti Tree.

ARLTARPILTA INELYE RANGERS

Based at Atitjere (Harts Range), the Arltarpilta Inelye Rangers conducts biodiversity surveys and manages weeds, feral animals and fires. The rangers also help traditional owners and neighbouring pastoralists to maintain fences that protect water places and sites of cultural significance.

Project Spotlight: Missing rocks welcomed home

We survey and manage weed infestations, such as Athel pine, buffel grass, Parkinsonia and cactuses. Some time ago, when spraying weeds at Huckitta Station, we came across some unusual upturned rock. We knew that some stones were missing from Atnwarle Spring, near old Huckitta Station.

Some rocks, made up of mixed minerals, were taken from copper mines; some had fossils; and others were 'sugar crystal' or quartzite-like stones. They were used to build vegetable gardens and garden walls at old Huckitta homestead.

When the station managers later removed cactuses from the homestead's gardens with a front end loader, they also scooped up the rocks used to make the gardens. They left some and dumped others at Huckitta tip. When we found the dumped rocks, years later, we recognised 10 different types of stone and realised that they came from at least 10 different areas.

Ranger Barbara Petrick shows the fossils in some of the rocks.

Some of the rocks belonged to men's sacred sites, including one from the *ingwenenge* (witchetty grub gum tree) story.

We photographed the rocks to show the traditional owners who suggested they should be gathered and returned to their places of origin.

We visited the sacred sites with traditional owners to make sure all returned rocks were placed correctly. There was a lot of heavy lifting and positioning. It was important work to us and traditional owners: as they returned the rocks they spoke to the land and the spirits, and explained what they were doing so they wouldn't become sick or be punished.

Returning the rocks to their rightful place made us feel great: nothing should be taken from country, but if it is, it should be returned.

Ranger Martin Bloomfield carefully returns rocks under a tree.

KALTUKATJARA RANGERS

Kaltukatjara Rangers delivers cultural and natural resource management activities on the western portion of Katiti Petermann IPA near the West Australia and South Australia borders. The area is a refuge for the threatened great desert skink, brush-tailed mulgara and the black-footed rock wallaby. The group is based in Kaltukatjara (Docker River) and maintains tourist facilities while helping with cool-weather burning in the cross-border region that reduces the severity and frequency of summer wildfires. It also undertakes feral animal management, and protects important waterholes from both camels and invasive weeds.

Project Spotlight: Water crisis

Our community is proud of the work we do looking after country. Our country is mostly spinifex sandhills with rocky ranges. Water is precious and we help to look after many waterholes and springs – we make sure that native animals have good access.

The summer of 2018 was very hot and especially dry, so the waterholes were low. Big mobs of camels came into Kaltukatjara looking for water.

They quickly emptied Urruru, a usually very deep waterhole in a river bed near the community; it's a favourite place for the area's families to visit. This year, some camels were trapped in the deep, sticky mud and they started to die.

Even before they emptied Urruru, the native animals suffered as they had no clean water to drink, while people from the community could not swim in the polluted water.

We quickly removed the rotting carcasses from the waterhole, taking care not to get sick. We did a safety analysis and identified all the risks: we wore disposable coveralls, rubber gloves, face masks and goggles.

Kaltukutjara Rangers clearing carcasses from Urruru.

Urruru at its best.

We dragged the camels one by one from the waterhole with a troop carrier fitted with a snatch strap. Twenty dead camels were moved a safe distance from the waterhole.

It was hot, smelly and disgusting work. We didn't enjoy it, but it was necessary for the immediate health of the community and the future health of Urruru.

We visited the area a few weeks later and saw that the dingoes had done a good job cleaning up the carcasses.

Our traditional owner ranger advisory committee is looking at new types of electric fencing to keep camels out of waterholes in the future. This summer we have agreed with the community to implement an emergency camel plan that involves an early warning system. Traditional owners are working on an agreement with an Aboriginal company to muster and remove camels.

We hope everyone will be able to enjoy Urruru for many summers to come.

Urruru in the summer of 2018–19.

LTYENTYE APURTE RANGERS

Ltyentye Apurte Rangers works on the Santa Teresa Aboriginal Land Trust that surrounds its base at the Ltyentye Apurte (Santa Teresa) community, about 80 kilometres southeast of Alice Springs.

Project Spotlight: Keeping feral animals out

In April, we worked with the MacDonnell Regional Council to remove over 100 dead horses from the Iperte-Uyerreme waterhole, a sacred site on the land trust. Over the unusually hot and dry summer more than 180 horses drank most of the spring's water. Dead birds and kangaroos were also seen in the area. The waterhole is also a popular swimming place for locals, and it feeds other swimming holes in the area. Traditional owners and the community decided to remove the carcasses to stop people from getting sick. Six rangers worked with four regional council workers, and two traditional owners monitored the heavy machinery to make sure it didn't damage the spring.

It took three days to move the carcasses more than 200 metres from the waterhole. The council workers picked up the horses with a backhoe and dropped them into a front-end loader which took them to a tip truck. We pulled out by hand some dead horses that the backhoe couldn't reach.

Iperte-Uyerreme before the clean up.

Good safety procedures were vital to keep rangers safe when clearing carcasses from Iperte-Uyerreme.

We also picked up bones and smaller remains after the machines had finished. Our combined effort was a success and an example of what can be achieved when organisations work well together.

Once the horses were removed, water started bubbling up out of the ground in three spots. We then fenced the springs with portable panels to protect them from horses still in the area. We installed sensor cameras to monitor the animals visiting the cleaned waterhole. The cameras photographed many different birds, perentie, dingoes, foxes and cats coming to drink, as well as a few horses and a family of camels which tried but couldn't get to the water.

The water quality improved and the waterhole slowly filled, even without rain. We continue to monitor the water quality and the camera images at Iperte-Uyerreme and other significant sites to ensure Iperte-Uyerreme is returned to the state it was in before the arrival of so many desperate feral animals.

Iperte-Uyerreme after the clean up with fencing in place around the springs.

MURNKURRUMURNKURRU RANGERS

Murnkurrumurnkurru Rangers is based in the community of Daguragu and operates across the Daguragu Aboriginal Land Trust and the northern portion of the Hooker Creek Aboriginal Land Trust. The group also occasionally participates in projects in the southern section of the Judbarra National Park.

Project Spotlight: Young and old connect with country

In June, we hosted our first 'back on country' bush trip at Kunawa (Cattle Creek Station) on Gurindji country. Thirty-six people attended the camp that brought together the new Kunpulu (Sawfish) Junior Rangers from Kalkaringi School with traditional owners and elders to reignite the exchange of cultural knowledge exchange.

The traditional owners welcomed everyone around their campfire.

"It's my favourite spot to go camping. I love to go back and see that place again, especially with junior rangers," traditional owner Cassandra Algy said.

The new junior ranger group and the bush trips are a result of the plans of the local traditional owner ranger advisory committee which wanted us to deliver more opportunities for traditional owners to maintain a cultural connection to their country and to engage more kids in caring for country and cultural activities through a junior ranger program.

Ranger Ursula Chubb shows brolga eggs to student Donielha Donald.

'Back on country' activities are largely up to traditional owners. They include taking family out bush, sharing knowledge with young people through telling and recording stories, engaging them in cultural activities, visiting sacred sites, and bush tucker and bush medicine collection.

Since the start of 2019, the junior rangers have learnt about caring for country and strengthening cultural connections to their country. "We took the junior rangers for walks looking for bush tucker, bush medicine and animal tracks. But my favourite thing was [the] old people singing and telling stories for the kids, the junior rangers," ranger Helma Bernard said, while her colleague Harlan Scobie's highlight was "taking traditional owners out to find a sacred site".

Ranger Phillip Jimmy said: "Everyone was mixing together, enjoying ourselves. Old people, young people, where we belong. Out bush, caring for country."

The bush trip inspired us to look for more activities to reinvigorate cultural connections. "It was a privilege and honour to witness elders teaching the junior rangers traditional dances and songs from Kunawa, some of which had not been sung for many years and are at risk of being lost," ranger group co-ordinator Jacqui Young said.

We are grateful to the traditional owners, junior rangers, Kalkaringi School, WANTA, Karungkarni Art Centre and Gurindji Aboriginal Corporation for their contributions to this project.

Young and old gathered together on country at Cattle Creek.

MURU-WARINYI ANKKUL RANGERS

Muru-warinyi Ankkul Rangers works on large areas of Aboriginal land around Tennant Creek, as well as on jointly managed NT national parks, and pastoral and government-owned land.

Project Spotlight: Surveying *yukulyarri,* the black-footed rock wallaby

In October, we teamed up with traditional owners of Nguyarrmini and the CLC's regional land management officer to host a ranger exchange for the Anmatyerr and Ltyentye Apurte ranger groups so we could learn about surveying rare black-footed rock wallabies.

We set up the camping area a week before, installing windbreaks, toilets and a bough shelter. We went to a site where we have been monitoring and surveying the threatened wallabies for more than 10 years.

This year, we tried a new technique: a scat plot. This is done by drawing a circle on a rock, then collecting, counting and measuring the scats within the circle. We learned this technique on a ranger exchange at Kalka in northern South Australia last year.

We also checked camera traps which were set six months earlier to monitor the number of different species that use the same caves as the black-footed rock wallaby. The data collected shows that these near-threatened species share caves with animals like dingoes and feral cats!

Traditional owners have suggested we survey another area around Nguyarrmini for the black-footed rock wallaby.

Rangers Maurice Campbell, Anton McMillan and Bevan Pepperrill record rock wallaby scats.

A dunnart is carefully removed from a pit trap.

Anmatyerr Rangers, Ltyentye Apurte Rangers and Muru-warinyi Ankkul Rangers at the Mission Block survey camp.

NORTH TANAMI RANGERS

North Tanami Rangers are based in the community of Lajamanu. The traditional owners of the Northern Tanami IPA have entrusted the group to manage the four-million-hectare IPA in accordance with their management plan. The IPA stretches from just north of Lajamanu, south to the Tanami mine in the south and adjoins the Southern Tanami IPA.

Project Spotlight: *Warlu manu walpajirri* – burning and bilbies

In early June, we travelled with Warlpiri Rangers with nine full troopies for a very important country visit to Wardalya at the southern end of our IPA. Wardalya is a *mala* (hare wallaby) and *ngapa* (water) *jukurrpa* or dreaming place. It is the most northern song and story place for the *mala* travelling from Uluṟu into Warlpiri country.

We used a helicopter to burn the area, survey bilbies and visit cultural sites.

The most senior man for Kurlpurlunu went on several helicopter trips with younger *kirda* (bosses/owners) and *kurdungulu* (managers) to sing sacred songs and tell stories of the *ngapa jukurrpa* (water dreaming). For most of us, this was the first visit to this very important and remote place. The joy on faces back at camp was the most memorable and rewarding part of the trip. Passing on of knowledge about the site and instructions for its management was timely and important.

Ranger Joy Herbert looks out across one in a series of dry lakes at Wardalya (Spider Lakes).

The elders also helped us to look for bilbies and we were able to add a number of active burrows to the known habitat of bilbies in the Tanami Desert.

We set up remote cameras which captured images of bilbies. We also added a couple of goannas, feral cats and a python to the menu of our camp kitchen.

Kirda (bosses/owners) and *kurdungulu* (managers) for Kurlpurlunu on site. Almost all had the opportunity to view the area by helicopter and hear stories and songs from elder Jerry Jangala Patrick (fifth from the left).

TJAKURA RANGERS

Mutitjulu's Tjakura Rangers manages cultural and natural resources on the eastern half of the Katiti Petermann IPA, which surrounds the iconic Uluru – Kata Tjuta National Park. It is our newest ranger team.

Project Spotlight: Looking after *tjakura*

Since the launch of our group in March 2018, we have grown to three permanent parttime, and three casual rangers. We clean up *tjukula* (waterholes) by removing buffel grass, camel bones and carcasses, and installing fences to keep camels and horses out. We use camera traps to monitor how different species use *tjukula* and carry out *waru* (fire) work to protect our country from wildfires and stimulate new growth.

One of our most important jobs is to monitor and protect *tjakura* (great desert skink). We map its distribution, gauge its response to threats while working to eliminate threats, monitor predators around burrows, and pass knowledge on to *tjitji* (children).

"We work with *tjakura*, we look after *tjakura,*" ranger Ashley Paddy said. "There are a lot of *tjakura* a long way away. We can get *tjakura*, and we can see them. Other rangers can come here and see the *tjakura*. Our rangers can take them and show them the *tjakura*."

In November 2018, rangers set camera traps around burrows on the Katiti Petermann IPA to assess how *tjakura* use them. Regular activity was seen in all burrows, both day and night, indicating a significant population.

Rangers Glen Woods, Roy Tjukintja and Peter Norman dug out a waterhole which had filled with silt.

Anangu (Aboriginal people) from Mutitjulu and Kaltukatjara (Docker River) said they had not observed any such threatened species in a long time and that it is important to see them. We organised a threatened species survey with senior residents from both communities and Nyangatjatjara College students. We used pitfall traps which allowed us to observe and handle not only *tjakura* but also *murtja* (mulgara), *lungkata* (blue-tongued lizard) and *tarkawara* (spinifex hopping mouse). We again monitored with camera traps in March and planned further survey work later in the year.

In the cooler months of 2019, we burnt the country to protect the burrows from wildfires. As ranger Peter Norman said: "We are looking after *tjakura*. Not allowed to burn near *tjakura*. Gotta look after *tjakura*. Gotta keep the animals safe. *Tjakura* is in our badge."

Working with the Uluru – Kata Tjuta National Park rangers, we adopted a walk-and-burn technique to survey for new burrows in the spinifex, while establishing a firebreak. We identified a path through the spinifex which would provide a good work zone for *waru*. A small break was created by removing vegetation with hoes. This bare strip acts as a buffer to prevent fire reaching *tjakura* burrows "We make firebreaks so it won't get burned again," ranger Glen Woods explained.

Glen Woods and Daniel Wilson conduct a controlled burn that will protect *tjakura* burrows from wildfires.

TJUWANPA RANGERS

Tjuwanpa Rangers in Ntaria (Hermannsburg) manages the natural and cultural resources of five Aboriginal land trusts in the Ntaria region, as well as of the Finke Gorge and West MacDonnell national parks. The group is responsible for removing Athel pine and other weeds in the Finke River catchment and managing threatened species, such as the largest known population of the endangered Slater's skink. It also maintains local tourism infrastructure, monitors and protects water places, supports intergenerational knowledge transfer, and manages feral animals.

Project Spotlight: Tourism adventure ride consultations and Anzac Day ride

From July to September 2018, we helped traditional owners, CLC and NT Parks staff and our CLC colleagues with planning, consultation and work area clearances in preparation for the proposed Red Centre Adventure Ride – a mountain bike trail and campsites to run the length of Tjoritja National Park.

We helped with camp logistics: collected firewood and transported people to the proposed sites. We attended camps with families speaking for different parts of the park and learned about cultural sites from senior traditional owners. If the adventure ride goes ahead, the traditional owners and our group are interested in track construction and other employment and business opportunities. We also want to live nearby to remain closely involved with the tourism venture.

We have helped Ntaria (Hermannsburg) school to run an Anzac Day horse ride from Ntaria to Alice Springs for several years. This year about 20 residents, including Tjuwanpa men and women's rangers, senior elders and senior school students were involved in the eight-day ride. We prepared the students for the ride to make sure they didn't become dehydrated and exhausted. We provided water for the horses, helped young riders with saddles and horse husbandry, and rode alongside them.

The ride took was a huge success and we found that being part of it and paying respect to fallen Anzacs was memorable.

Participants in the Anzac Day ride leave Ntaria at the beginning of their journey.

The Anzac Day ride from Ntaria to Alice Springs took eight days.

WARLPIRI RANGERS

Warlpiri Rangers is responsible for the day-to-day management of the Southern Tanami IPA. Covering some 10 million hectares, the IPA is the largest terrestrial protected area in Australia. The operational centre for the ranger group is the community of Yuendumu, with teams of casuals sourced from the neighbouring communities of Willowra and Nyirrpi.

Project Spotlight: Warlpiri rangers to the rescue

Alice Henwood, Nelson Tex, Max Kennedy introduce themselves at the Species of the Desert Festival.

In April, we joined traditional owners, the Southern Tanami IPA co-ordinator and CLC staff from Alice Springs to carry out extensive targeted ground burning in the Mt Bennett area, 70 kilometres west of Willowra. We broke up fuel loads and protected several significant sites.

Unfortunately, after the helicopter suffered a mechanical failure, the trip was cut short. The pilot had to make a mid-flight emergency landing, right on dusk, about 45 kilometres from our camp. It left two passengers and the pilot stranded in the middle of nowhere for the night with little water and few warm clothes.

Back at camp we made the decision to rescue them. It took the rescue group seven hours to travel to find the helicopter, then another six hours to return everyone safely to camp.

A mechanic later was flown out to the helicopter and found that an O-ring had failed, which had led to a loss of oil pressure in the helicopter's engine.

Despite the drama, the trip helped people to protect their sacred sites and strategically burn their country and we were able to practise how to respond in an emergency.

RANGER TRAINING AND DEVELOPMENT 2018–19

STAFF DEVELOPMENT

Our ranger program is a successful and popular model for Aboriginal employment and skills development in remote communities.

In 2018–19, we employed 99 rangers across 12 ranger groups, either as fulltime, permanent parttime or casual workers. This equates to 71.2 fulltime equivalent positions. We created entry-level positions to build capacity and interest among young Aboriginal people who have little or no previous work experience. Casual employment is offered on larger-scale projects that require more staff, such as surveys, fire management and large-scale weed control or fencing. Casual rangers often progress to permanent positions when they have gained experience.

EMPLOYMENT

Nine rangers were in fulltime positions at 30 June 2019, 68 were parttime and 22 were casuals. Between 2010 and 2019, 900 Aboriginal people worked as CLC rangers. They were aged between 16 and 67 years and had a wide range of knowledge and skills. In 2018–19, we increased the number of ranger support officers from two to four. The position is a stepping stone to the ranger co-ordinator role. Two rangers moved to temporary positions within the CLC's land management section.

Figures 5 shows that the program employed three times as many men as women for the second year in a row. The percentage of female rangers decreased compared with recent years. Groups with strong female leaders employ more female rangers than other groups.

A variety of employment options are needed to accommodate the responsibilities of and demands on remote community residents. Many prefer parttime and casual employment as this allows time to attend to family and community needs.

TRAINING & PROFESSIONAL DEVELOPMENT

Training and professional development are important components of our ranger program. We develop the basic work skills and competencies of new rangers, supporting experienced rangers to complete studies in conservation and land management, and promote rangers into ranger program support officer and ranger group co-ordinator roles.

Rangers participated in 34 training events. Twenty-eight of these delivered 16,838 hours of accredited training while six events delivered 706 hours of non-accredited training, for example, workshops delivered in-house or as part of specific work-related activities. Forty-eight per cent of accredited training hours were towards certificate II in conservation and land management, 51 per cent towards certificate III and one per cent towards certificate I. The ranger program continues to mature and stabilise, and more rangers have certificate III qualifications than ever before.

We co-ordinated 128 new enrolments in accredited courses: 13 in certificate I, 63 in certificate II and 52 in certificate III. Two rangers graduated in certificate I, ten in certificate II, three in certificate III and four in certificate IV.

FIGURE 4. RANGER EMPLOYMENT TYPE, 2010–19

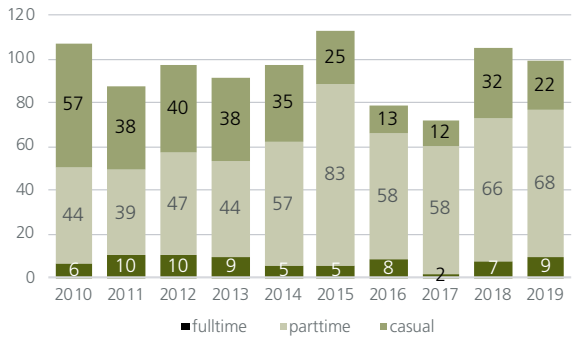


FIGURE 5. MALE AND FEMALE RANGERS, 2010–19

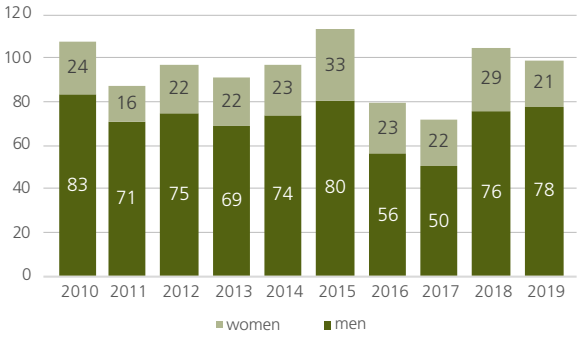


FIGURE 6. RANGER EMPLOYMENT TYPE BY GENDER, 2018–19

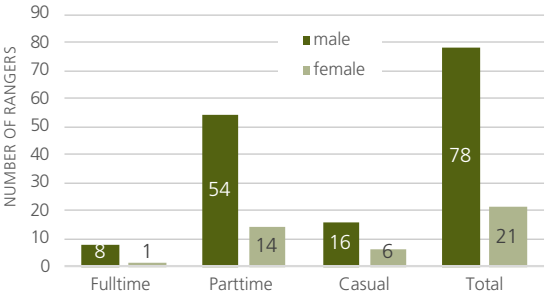


FIGURE 7. PERCENTAGE OF WOMEN RANGERS, 2010–19

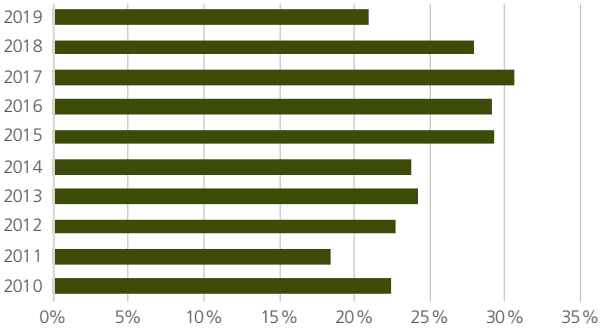


FIGURE 8. NUMBER OF RANGERS UNDERTAKING EACH CERTIFICATE LEVEL, 2018–19

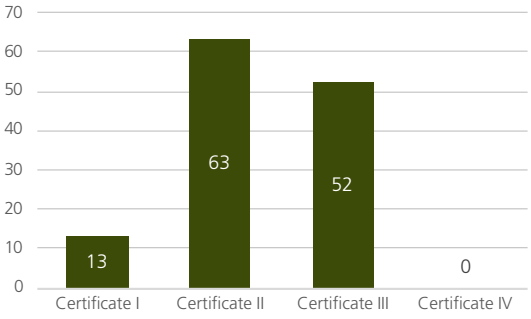


FIGURE 9. NUMBER OF RANGERS UNDERTAKING SPECIFIC TRAINING, 2018–19

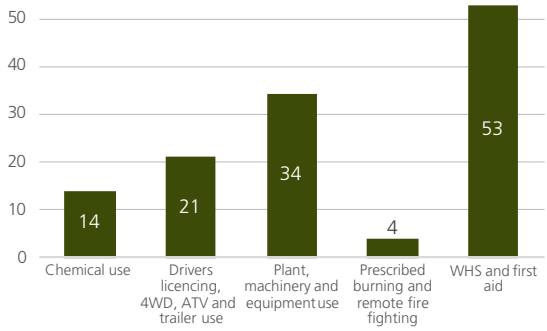
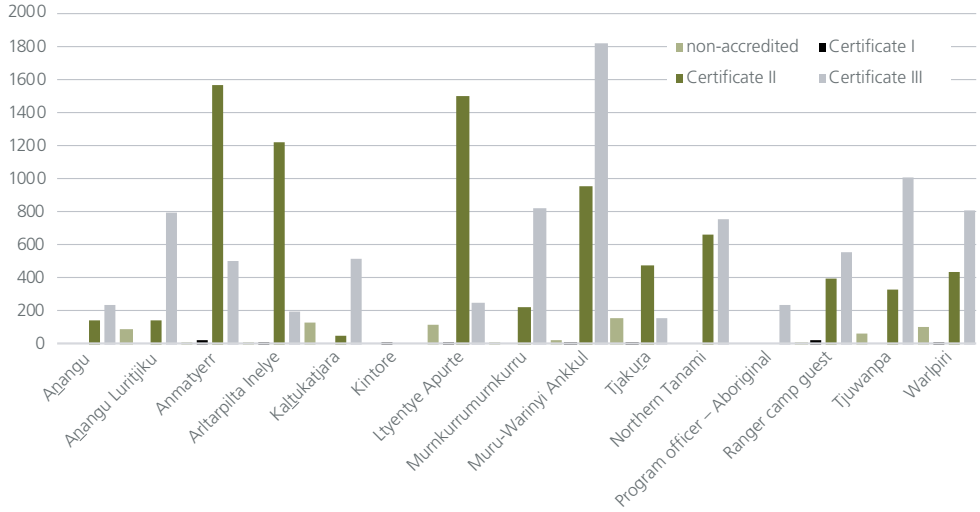


FIGURE 10. TRAINING HOURS BY RANGER GROUP, 2018–19



At the start of 2019, there were no new enrolments in certificate IV because the only local registered training organisation, the Batchelor Institute of Indigenous Tertiary Education (BIITE), was unable to offer the certificate following significant staff cuts and the subsequent loss of its registration to deliver the certificate. The enrolment waiting list for this certificate increased from 12 to 18 rangers until we made a convincing case for the re-registration of the certificate IV course to the BIITE. Six months later, it had committed to 12 certificate IV enrolment places for CLC rangers to commence in the 2019–20 period. Six rangers remain on the waiting list.

As the ranger program expands, it becomes more and more challenging to allocate training resources equitably among ranger groups. Groups with a relatively stable workforce and experienced co-ordinators complete more training hours, while those without stable co-ordinators and workforces miss out. Groups that participate in more advanced levels of training also complete more training hours; for example, the small Arltarpilta Inelye ranger group completed more training hours than other groups because two long-serving rangers consistently undertook certificate III units.

The Muru-warinyi Ankkul, Ltyentye Apurte and Anmatyerr ranger groups benefited from their workforce stability and the experience of senior rangers in their ranks. Good planning and local capacity led to improved training participation among these groups. Rangers in very remote communities tend to miss out on training because of the high cost and other delivery challenges there. This explains why the Anangu, Kaltukatjara, Murnkurrumurnkurru and Tjakura rangers undertook less training than other groups.

Low computer literacy continues to limit ranger careers. A working group with representation from four ranger groups – Arltarpilta Inelye, Ltyentye Apurte, Murkurrumurnkurru and Muru-warinyi Ankkul – identified the benefits of computer 'champions' within the workplace to provide support and encouragement to their less experienced peers. We continued discussions with potential training providers of basic computer use across the ranger program.

WORKPLACE HEALTH AND SAFETY

Our rangers undertook 5,386 hours of compulsory workplace health and safety (WHS) training. Twelve rangers took part in accredited all-terrain vehicle (ATV) training and 18 rangers attended accredited training in the preparation, storage and safe handling of chemicals. First aid and WHS remained a core training priority. Of the 28 rangers who undertook this training, eight completed more advanced remote first aid training.

We engaged the Centre for Appropriate Technology to deliver plant operator training in erosion control, track maintenance and large boundary fencing projects. As part of a fencing project on the Angas Downs IPA four Anangu rangers completed on-the-job grader operation training. A further 15 rangers completed skid steer loader operation training.

Rangers Dennis Mahoney and Troyston Corbett from the Muru-warinyi Ankkul Rangers during aerial incendiary training.

BUILDING SKILLS AND KNOWLEDGE IN THE WORKPLACE

Fifty-seven rangers participated in non-accredited training. This included Aboriginal mental health awareness, venomous snake handling, safe food handling, leadership training, a soil erosion course and an unconscious bias awareness workshop.

RANGER MENTORS

Requests for support from ranger mentors resulted in 1,215 mentoring engagements. During 78 visits to ranger groups, mentors built the capacity of rangers to self-manage issues affecting attendance and performance. Work-related coaching accounted for most of the mentoring activities, although support around health and wellbeing, alcohol and drug use, and financial and legal referrals was also important. Additional funding from the ILSC enabled us to expand our ranger mentor team from two to four staff. Lower mentor-to-ranger ratios will allow the team to implement more proactive ranger development initiatives.

ANNUAL RANGER CAMP

More than 70 CLC rangers attended the annual ranger camp at the Tjoritja/Glen Helen Resort in April. Five rangers from the NT Parks and Wildlife Commission, four from the Uluṟu – Kata Tjuṯa National Park, 14 from Western Australia (Kiwirrkurra and Kunawarritji), and four from the emerging Utopia ranger group at Arlparra also attended. Special guests included NT ministers Lauren Moss and Eva Lawler, former CLC chair Francis Kelly, CLC CEO Joe Martin-Jard and BIITE CEO Dr Wendy Ludwig.

Ten training providers delivered 16 training and development activities. Ranger wellbeing was a key theme of the camp. Researchers from the Australian National University presented the results of the ranger wellbeing survey undertaken at previous ranger camps and helped the rangers complete follow-up surveys. More than 100 rangers took part in a well-received workshop on the impacts of trauma, alcohol and other drugs.

Three ngangkaṟi (traditional healers) presented on the Ngaanyatjarra Pitjantjatjara Yangkunytjatjara Women's Council's ngangkaṟi services. Fifteen rangers had one-on-one consultations with ngangkaṟi about physical, emotional and social issues. Thirty-eight rangers received influenza vaccinations.

WORKING WITH SCHOOLS

The rangers continue to work closely with students in remote communities. They interact with students in classrooms and on country to demonstrate employment pathways and the value of ranger employment. This motivates the students to stay in school longer and contributes to improved learning outcomes.

All ranger groups worked with junior ranger programs, traditional owners, parents and other interest groups. They facilitated the transfer of knowledge between generations and provided work experience by sharing their skills. A highlight was the development of the Kunpulu (Sawfish) Junior Rangers in Kalkaringi, in partnership with the local school. The Murnkurrumurnkurru Rangers hosted a 'back to country' trip connecting these junior rangers with traditional owners and elders who shared their knowledge about sacred sites, dances, songs, bush tucker and bush medicine (see p. 16).

PARTNERS AND SUPPORTERS

The CLC acknowledges the major funding bodies of its ranger program: the Australian Government's Department of Prime Minister and Cabinet and the Indigenous Land and Sea Corporation.

Australian Government
National Indigenous Australians Agency

NIAA

Australian Government
Indigenous Land and Sea Corporation

The ILSC GROUP

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GLOSSARY

ALT	Aboriginal Land Trust
ATV	all-terrain vehicle
BIITE	Batchelor Institute of Indigenous Tertiary Education
CDEP	Community Development Employment Program
CLC	Central Land Council
DSS	Desert Support Services
IAS	Indigenous Advancement Strategy
IDA	Indigenous Desert Alliance
ILSC	Indigenous Land and Sea Corporation
IPA	Indigenous Protected Area
PM&C	Department of Prime Minister and Cabinet
WHS	workplace health and safety

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FRONT COVER IMAGE: Anmatyerr ranger Angela Purvis.

BACK COVER IMAGE: Ltyentye Apurte, Anmatyerr and Muru-warinyi Ankkul rangers combined forces for a black-footed rock wallaby survey at Nguyarramini in 2019. From left to right: Johanna Shand, Josie Haines, Renita Riley, Angela Purvis, Josephine Grant, Ann-Marie Waistcoat, Mildred Nelson ,Gladys Brown and Phyllis Nelson.