



Areme Ikngerre-ipenhe

Eastern Arrernte People Healing Country



Plan for the Ltyentye Apurte Rangers region

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Glossary of Eastern Arrernte terms

Altyerre	creation time
anpernirrentye	the connections between people and all things
apmere	country; place; home; hearth
apmereke-artweye	traditional owner of places through father's father
Arrernte	language group, socio-cultural group in Central Australia
ikngerre-ipenhe	eastern (Arrernte) people
kere	meat, animal foods
kwertengerle	traditional owner of places through father's mother, mother's father, or sometimes mother's mother. Kwerten gerle are sometimes translated as 'workers' or 'carers'
ltyentye apurte	stand of Beefwood trees; also name of Santa Teresa, name of ranger group
merne	plant foods

Acronyms used in this plan

AAAC	Atyenhenge Atherre Aboriginal Corporation
AAPA	Aboriginal Areas Protection Authority
ALT	Aboriginal Land Trust
CLC	Central Land Council
PPL	Perpetual Pastoral Lease
TORAC	Traditional Owner Ranger Advisory Committee

Appendix 2 has a plant names list. Other terms are defined in the text.



Uyetye spring – rain dreaming site.

Anwerne Tyerrtye ikngerre-ipenhe areye

Arrekwele nhakwe arle apetye-menge. Apmere ahelhe anteke nhenhe anwerne kenhe mwerre anetye-nhenge apme ingkernereye-ke. Itne anteme Rangers aneme-le. Itne itelereme-le ampere mwantye-le arnte-arnte arelte anetye-nhenge.

Anwerne anteme Anpernirrentye mwantye-le apenteme-le akaltye-le anthelte anetyenge arrekwerle altyerre-ntyete areye arreke, mpwarelte anetyenhenge, apmere-ke. Tyerrtye-ke kwatye-ke, merne, kere-ke, apmere-ke artweye, kwertengerle arlke. Artweye nhenge akwerte apmere ahelhe itne kenhe-le Rangers-le anteme akwerte akaltyele anthelte anetye-nhenge, akaltye-irreme-le warrke-irrerlte anetyenge.

Vision for our Country

We are Eastern Arrernte people. In the future, our land will be better and healthier for our young people. They are our future rangers. They will know and care for our country. We will continue to follow the Anpernirrentye system of relationships as passed down by our ancestors from the Altyerre. Our system connects all things including country, people, waters, animals and language.

We will continue to respect *apmereke-artweye* and *kwertengerle*. Our families will live on their homelands. We will often visit our country. Our traditional owners and rangers will always teach, learn and work together.

(This vision was compiled from personal statements made by participants at the final review workshop).

About this plan

Why and for who this plan was made

Ikngerre-ipenhe are Eastern Arrernte people whose traditional lands lie east of Alice Springs. Their country encompasses Aboriginal Land Trusts (ALT's) as well as country now covered by pastoral leases and Northern Territory parks.

The Ltyentye Apurte Rangers work for and with *apmerekke-artweye* and *kwertengerle* – they are called 'traditional owners' in the *Aboriginal Land Rights (Northern Territory) Act 1976*. The rangers are based at Ltyentye Apurte (Santa Teresa community). Their work spans a huge area and incorporates Santa Teresa and Love's Creek (Arletherre) ALT's as well as Aboriginal Land Trusts throughout the wider region.

This plan is for and by Eastern Arrernte people. The plan supports them to look after their country and carry out cultural responsibilities within the Ltyentye Apurte Ranger work region. Eastern Arrernte people have always talked about what they want to protect and the worries they have for their country. This plan sets out what they have said they want to do over the next ten years to protect their country and culture.

The plan will guide Ltyentye Apurte Ranger Coordinators and Central Land Council (CLC) regional staff, rangers, traditional owners and members of the Traditional Owner Ranger Advisory Committee (TORAC) to set work to achieve their goals.

CLC may show the plan to government and other people. Then governments can better understand the work *apmerekke-artweye* and *kwertengerle* want their ranger group to do.

How this plan was made

This Country Plan was commissioned by Central Land Council (CLC) as traditional owners and CLC identified a need for a long-term plan to guide the work of rangers. Under the *Land Rights Act 1976* (NT), a function of CLC staff and CLC rangers is to consult traditional owners.

Thirty-eight traditional owners and rangers and four CLC staff attended three workshops with two facilitators to create the plan (see the table on page 62–63 at the end of this plan).

The workshops were held at Snow Bore, Ltyentye Apurte and Ross River. Participants visited important places on country and spoke and wrote about what they want for their country. The CLC staff and two facilitators helped by creating a space to include people, support them to take part in safe ways to speak and share. A review workshop was held at the Alice Springs Desert Park in June 2021.

The number of people who could be at the workshops was limited by funding and logistics. Some took part in all four workshops and some in one or two.

The facilitators documented people's contributions to the workshops in two Traditional Owner Country Reports.¹ These reports have quotes from participants and informative photos from the workshops. This Country Plan, the two Country Reports and annual Land Management operational plans made by the coordinators, rangers and TORAC complement each other. They are the road map to guide traditional owners and rangers in caring for country.

¹ Walsh, F. and Cawthorn, M. 2021a. *Traditional owner country report for Santa Teresa Land Trust and nearby areas*. March 2021. CLC Land Management, Alice Springs; and, Walsh, F. and Cawthorn, M. 2021b. *Traditional owner country report for areas in and beyond Inteye Arrkwe (Ross River) region, a wider area in the Ltyentye Apurte Ranger's region*. March 2021. CLC Land Management Alice Springs.

The *Altyerre* places we recorded during Country Planning workshops on Santa Teresa Land Trust and the wider Ross River area are listed. About twenty places are recorded for Santa Teresa ALT and more than fifty places recorded for Arletherre ALT and beyond (see Appendices to the Plan report Figures 1 and 2). Many more important sites exist that were not recorded during the workshops.

The plan was written by the facilitators based on what people said during the workshops, written sources, and the facilitators' knowledge and experience drawn from working with Eastern Arrernte people over many years. Participants at the review workshop selected most of the photos in this plan from about 150 photos.

At Snow Bore, *apmerekke-artweye* and *kwertengerle* map the main places on Santa Teresa ALT and nearby.



Structure

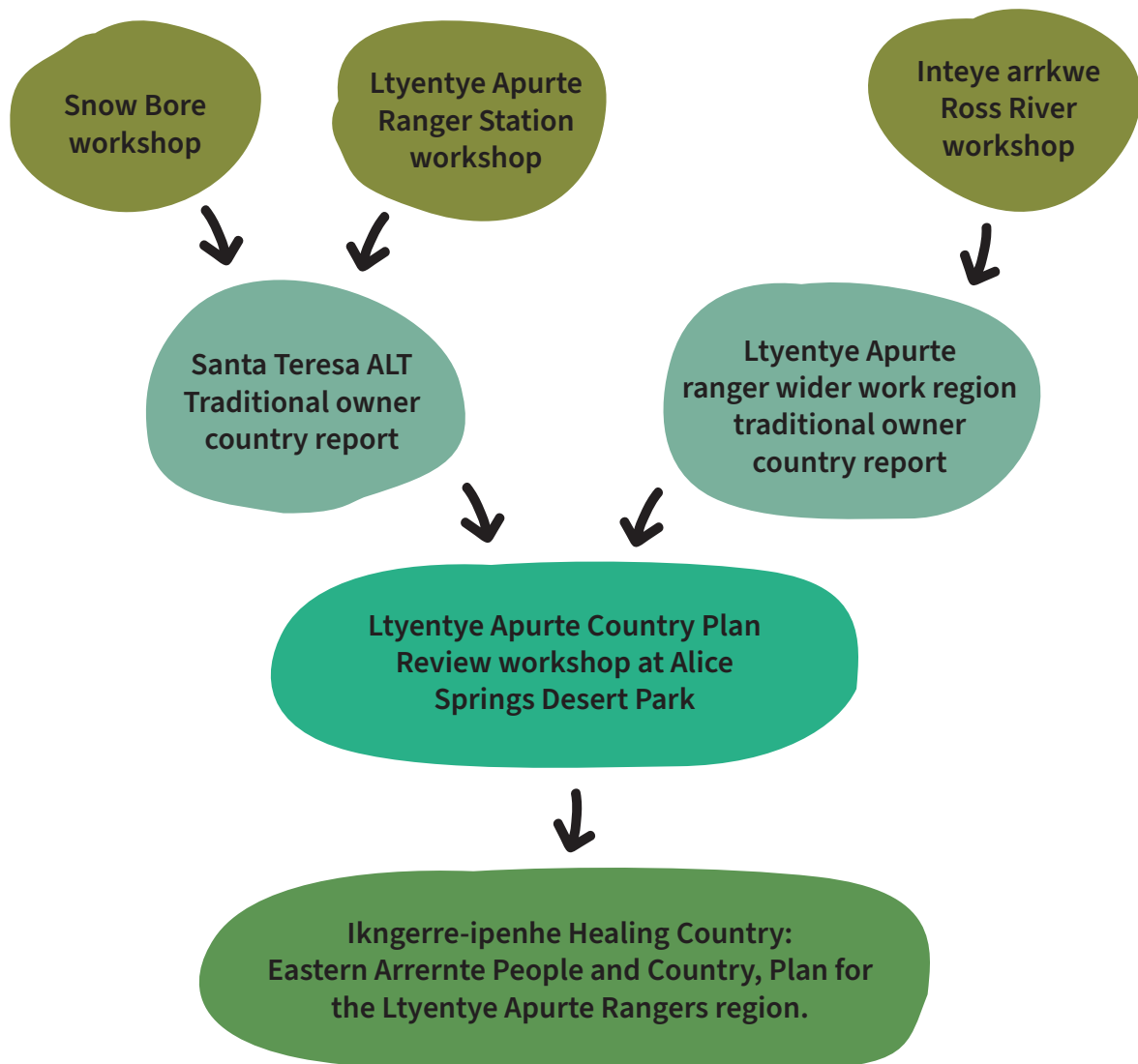
This plan contains background about Eastern Arrernte people, their lands, and past land management work. It shares their vision for their country. It identifies the main things that they value on their country – the many good things. It also records their worries about what they see as threatening the values of their country.

The main section contains strategies to protect and strengthen the things they value and reduce the threats. Future operational planning actions will be developed based on these strategies. Finally, there is a workshop participant list.

In a separate report is the appendices to the plan. These are:

1. Named places within the Ltyentye Apurte work region
2. List of significant animals and plants
3. Timeline of prehistory and historical events
4. Year by year summary of land management since the 1990s, and
5. All books, reports and films including published and unpublished sources.

Figure 1: Ltyentye Apurte Rangers Country Planning process from workshops to final plan





Apmereke-artweye and kwertengerle, rangers and others who work together at the Snow Bore workshop, August 2020. Back row L-R: Keith Gorey, Paul Williams, Philip Gorey, Charles Lechleitner, Derek Hayes, Anton McMillan, Alan Drover, Joe Palmer. Middle row L-R: Farron Gorey, Jeremy Williams, Ethan Gorey; Front row L-R: Johanna Shand, Kwementyaye Wallace, Kwementyaye Gorey, Elaine Gorey, Deandra Wallace, Natasha Hayes, Veronica Perrurle Dobson, Mia Mulladad, Annie Ryder, Justin Hayes, Malcolm Hayes, Dwayne Alice, Kelvin Kopp.

How to use this plan

This plan will guide operational planning by rangers and ranger coordinators. It may also support funding applications for long term projects or infrastructure.

Australian desert environments are the most variable in the world. Land managers must respond flexibly to changing conditions. Actions that follow the strategies in this plan will need to be adapted to human situations, cultural context, and environmental conditions of the work.

This plan records what *apmerek-artweye* and *kwertengerle* said in the workshops. Arrernte people's culture is central to this plan.

Some of what was talked about when making this plan was:

- What do Eastern Arrernte people want for their country and culture?
- What is good about Eastern Arrernte country?
- What worries people about their country?
- What do people want to do and how?
- How might weather and conditions affect doing the work?
- What equipment, funds and resources are available?
- What actions are possible and how to prioritise them?



Apmereke-artweye and *kwertengerle*, rangers, and others at the workshop at Ross River, November 2020. Back row L-R: Derek Johnson, Michael Hayes, Anton McMillan, Chris Thomson, Henry Oliver, Tyrone Wallace, Damien Ryder, Martin Campbell, Michael Drover, Kelvin Kopp, Tom Ruggles, Stanley Wallace, Marlene Doolan, Veronica Doolan, Kaylene Webb,

Ursula Johnson, Freda Johnson, Kwementyaye Gorey. Front Row L-R: Michael Taylor, Jeremy Williams, Farron Gorey, Paul Oliver, Joe Palmer, Alan Drover, Henry Bloomfield, Kwementyaye Mulladad, Keith Gorey, Kathleen Wallace.

Absent in photo, facilitators Cawthorn and Walsh.



Region of this plan – Santa Teresa Land Trust and wider Eastern Arrernte lands

The Ltyentye Apurte Ranger group is based at Ltyentye Apurte community. They work over the estates of many traditional owners and across a vast area covering many song lines and important places.

One focus area of the rangers' work is the Santa Teresa ALT which covers an area of approximately 1246 km². According to non-Aboriginal land tenure the land trust has a clear boundary; however from an Eastern Arrernte perspective people's traditional country extends from site to site across Aboriginal Land Trust boundaries and surrounding Northern Territory parks and cattle stations.

The Ltyentye Apurte Rangers and neighbouring ranger groups currently manage a huge area of country. Beyond Santa Teresa ALT, the work varies from year-to-year according to land management needs and the focus of the rangers involved (see Figures 3 and 4).

At the Ross River workshop traditional owners and CLC discussed the idea of establishing another ranger group to work across the wider region. It was suggested that the Ltyentye Apurte Rangers could support the new ranger group in its early stages.

Traditional owners, residents, and Ltyentye Apurte Rangers: life histories and skills

There are many important people in Arrernte families who lived on and taught about the land. Some elders, their life stories and knowledge are documented in books and reports that are listed at the end of this plan (see Relevant books, reports and films).

At the workshops, one of the activities participants did was to write a bit of their life stories. Each of these stories are in the Santa Teresa and Ross River traditional owner country reports. We want visitors and readers to know that traditional owners have lived most of their lives on or near to their country. They know it better than most non-Aboriginal Australians.

In summary, people describe themselves by skin names, the country of parents and grandparents and the places that are important to them. Many traditional owners have varied professions and work experiences including as:

- school teachers, family educators
- stock/cattle workers, horse-riders
- road maintenance and construction workers
- fencers, bore runners
- childcare, aged care, mental health care workers
- artists and painters
- woodworkers, craftsmen/women
- motor mechanics
- interpreters, translators
- multi-media makers, producers.

Eastern Arrernte customary associations and knowledge are foundational to the ranger program. The skills and experience of *apmerekke-artweye* and *kwertengerle* are useful and relevant to the work of the rangers.

Figure 2: Area of Eastern Arrernte lands (Henderson and Dobson 1994) indicated by the grey arrow and the approximate Ltyentye Apurte Ranger work area covered by this plan represented by the arrow.

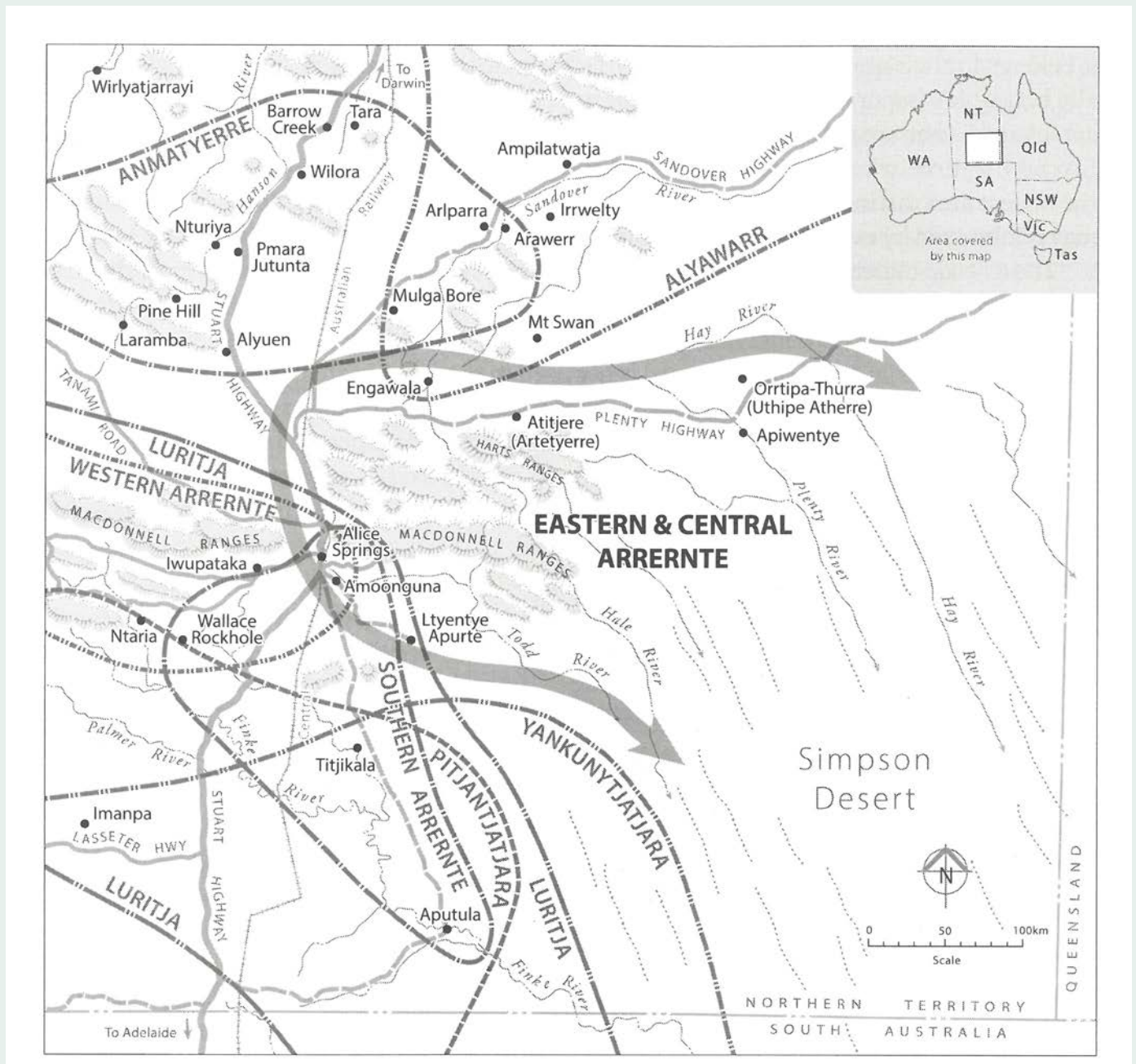


Figure 3: Santa Teresa Aboriginal Land Trust

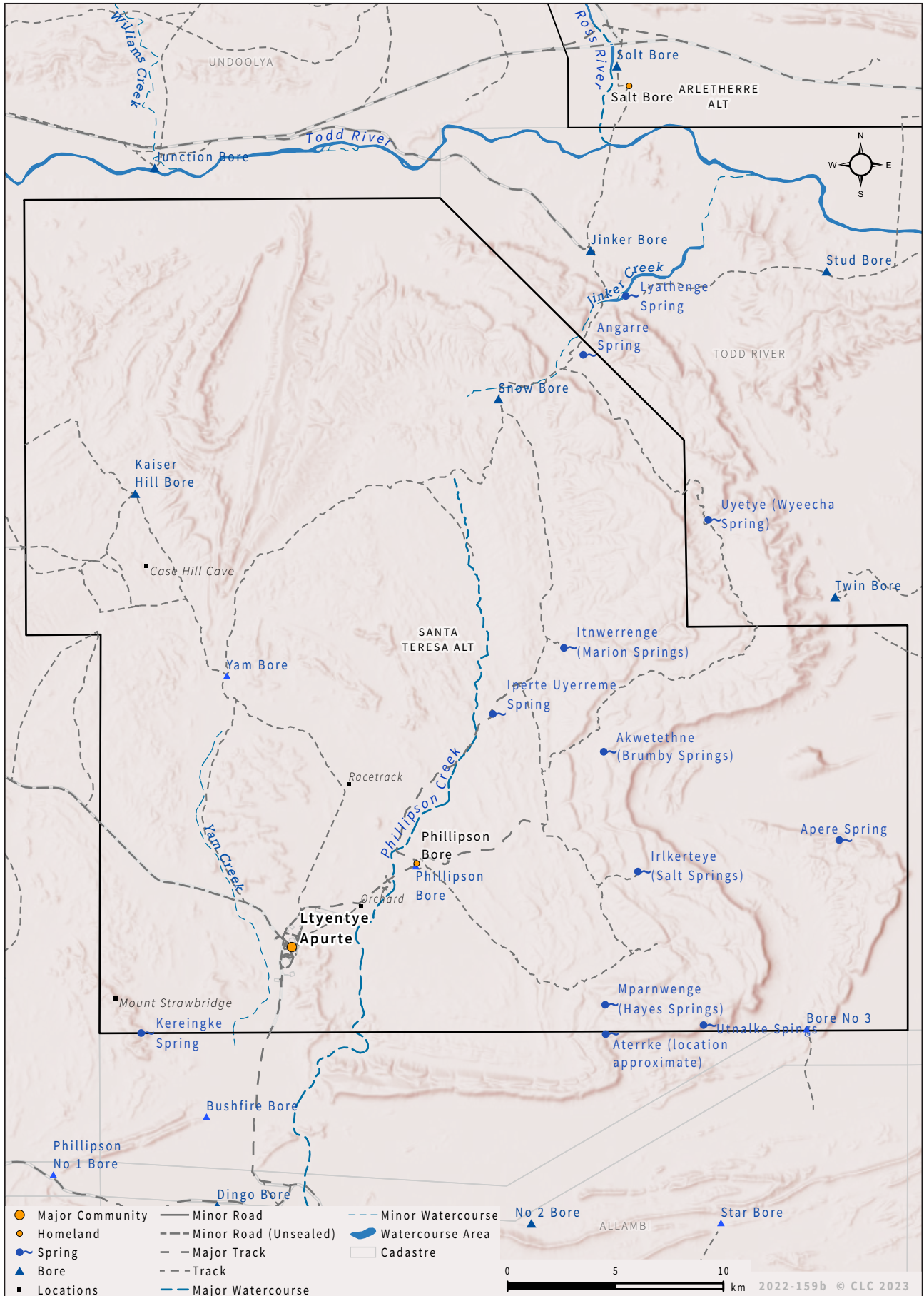
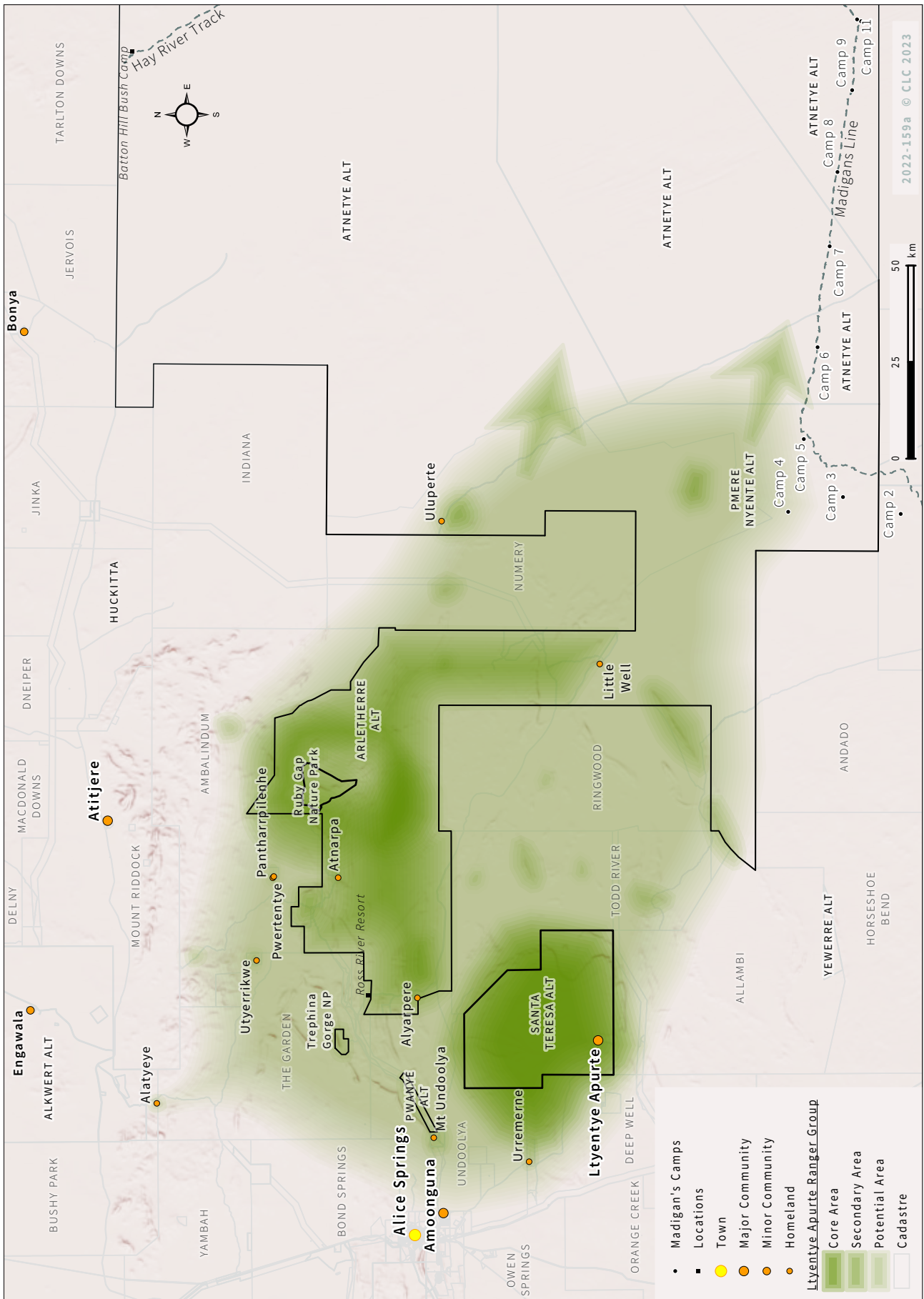


Figure 4: Ltyentye Apurte Rangers work area





Eastern Arrernte people and their country

Altyerre

Arrernte laws, customs, language and ceremonies originated in the *Altyerre* (Creation). This is a time in the past when *Altyerre* ancestors travelled across the landscape. They created all the features of the country through their actions, including the lands, waters, plants, and animals. The paths along which they travelled are sometimes translated as ‘song lines’ or ‘Dreamings tracks’ in English. Places where *Altyerre* spirits reside are referred to in English as ‘sacred sites’. The energy or vitality of country and people comes from these places.

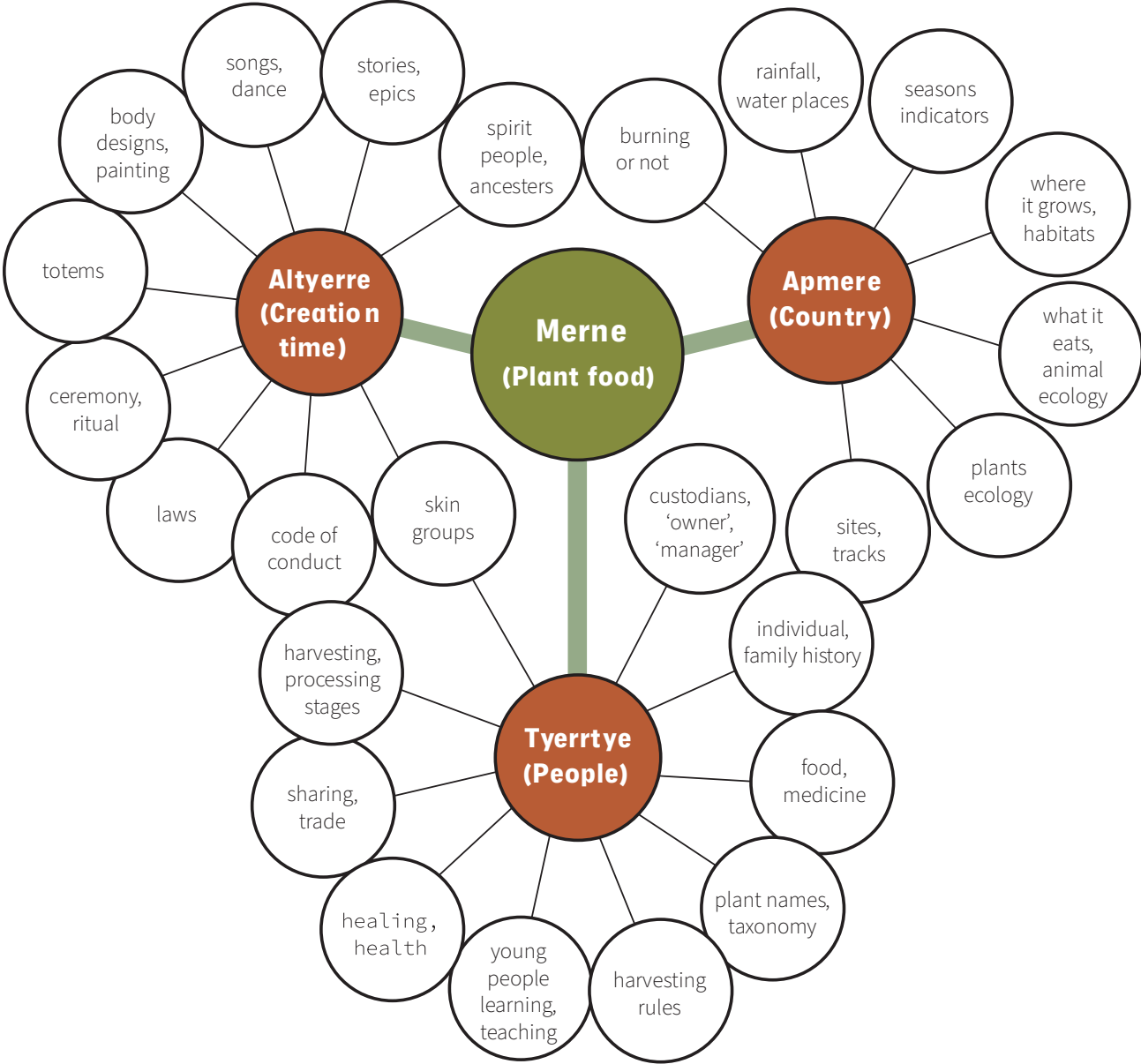
Eastern Arrernte ceremonies re-enact and celebrate the original activities of Creation ancestors during the *Altyerre*. These ceremonies help to maintain traditional law as well as the health and richness of the land and its peoples.

Anpernirrentye

Eastern Arrernte people have been caring for land for tens of thousands of years. Their ancestors were the first rangers. They travelled across the country and looked after waters and sacred sites. They hunted and gathered, and burnt land to promote the growth of bush tucker plants and to track animals. Their ways of living helped to keep the country productive and healthy. Knowledge about country has been passed down from generation to generation from ancestors to people in the present day.

Eastern Arrernte people, country, waters, animals, and plants come from the *Altyerre* and are related to each other. In Arrernte these relationships are called ‘*Anpernirrentye*’, meaning the connections between people and all things. *Anpernirrentye* explains how everything on Eastern Arrernte country is related. It encompasses the kinship system as well as the relationships between people, *Altyerre*, land, language and culture (see Figure 5). The health and well-being of people and country depends on these relationships being kept strong.

Figure 5: *Anpernirrentye* worldview describes relationships between people, country and all things (from Dobson, Walsh and Douglas 2013). Sometimes foods are at the centre but any of these elements can be centred according to context.



Kin groups and estate groups

Eastern Arrernte country is made up of different tracts of land sometimes called estates. *Apmereke-artweye* and *kwertengerle* are connected to estates through the *Altyerre* and their relationships with the Creation ancestors that give the country life and form.

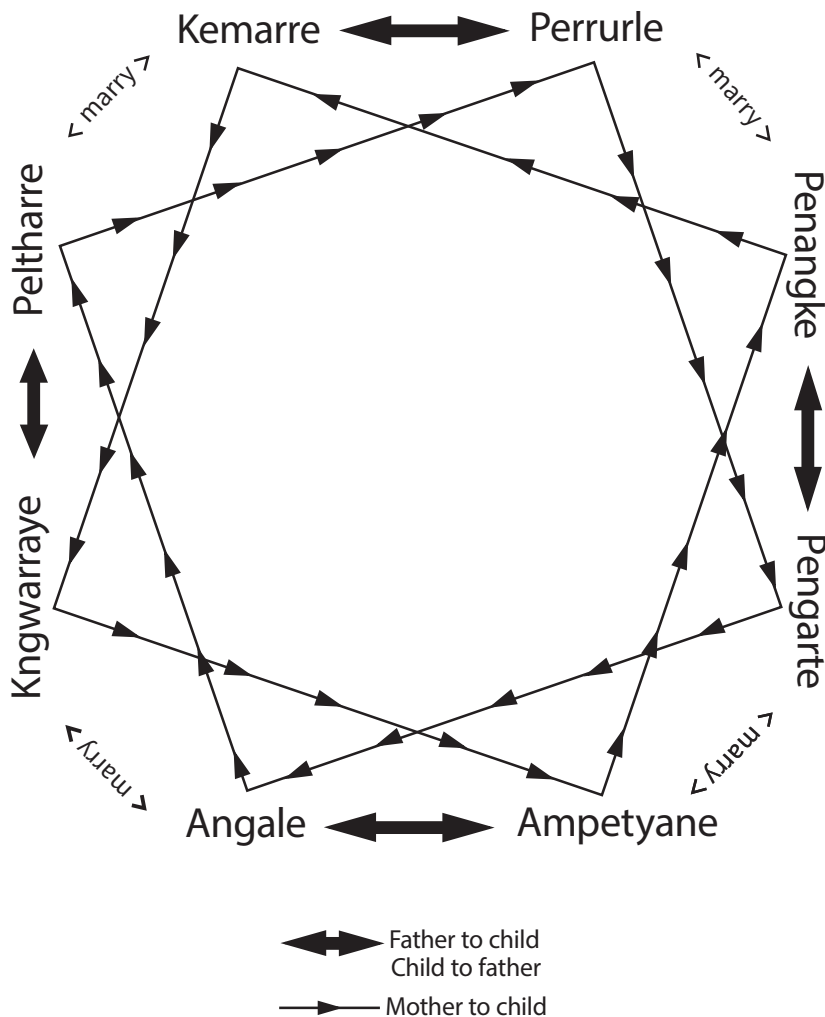
The kinship system also comes from the *Altyerre*. It sets out marriage rules and how people relate to each other and to the land. There are four main ways in which people are connected to country. These are through their father’s father (*arrenge*); mother’s father (*atyemeye*); father’s mother (*aperle*); and mother’s mother (*ipmenhe*).

Eastern Arrernte people follow an eight-class subsection system, also known as a skin system. All Eastern Arrernte people

are born into a particular subsection based on the subsection identity of parents and grandparents. The eight subsections are: *Kemarre*, *Perrurle*, *Penangke*, *Pengarte*, *Ampetyane*, *Angale*, *Kngwarraye*, and *Peltharre*. The diagram below shows the relationships between the subsections (see Figure 6).

This system provides a shorthand for categorising kinship relationships, not only with people, but also with plants, animals and the country itself. Some specific plants and animals have skin names that come from *Altyerre* and are connected to sacred sites and Creation stories.

Figure 6: Diagram of North-Eastern Arrernte section relationships (Henderson and Dobson 1994:42).





Catholic Mission School Note. From Richard Duckworth Collection, PH0542/0033, Library & Archives NT, 1947, (<https://hdl.handle.net/10070/720204>). In the public domain.

***Apmereke-artweye* and *kwertengerle* roles and responsibilities**

The kinship system is part of the Eastern Arrernte *Anperirrentye* world view and establishes the rules for how to look after the land. People who come from the land are *apmerek-artweye*. They inherit country, or estates, from their fathers and their fathers' fathers. In English they are sometimes called the 'owners' or 'boss' for the land. People who are connected to country through their fathers' mothers and mothers' fathers are called *kwertengerle*. People who trace a connection through their mother's mother are usually classed as *kwertengerle*. *Kwertengerle* is sometimes translated in English as 'manager', 'policeman', 'worker', or 'carer'. *Apmerek-artweye* and *kwertengerle* work together to care for country.

Eastern Arrernte history

Eastern Arrernte people have lived on this land since time immemorial. Archaeological research shows that human settlement of central Australia is very ancient; more than 30,000 years. Within the Ltyentye Apurte Ranger work region archaeological camp sites, stone

tool scatters and places rich in rock art such as Uyetye, Itnwerrenge (Marion Spring), N'dhala Gorge, Ewaninga, Keringke and Therreyertye show the presence of Eastern Arrernte people's ancestors.

Arrernte people lived on the land. They knew where the water sources were, as well as hunting and bush food areas. They walked the country caring for important places, food, medicines and other resources.

Following European colonisation, much of Arrernte country became cattle stations which brought about dramatic changes to people's lives. They could no longer travel across their lands, drink from their springs and waterholes, forage or hunt for food freely. Many Arrernte people continued to live in settlements on their land and work for pastoralists. Some people also lived and worked at the Arltunga goldfields or moved to Alice Springs or surrounding settlements.

The Little Flower Mission was established on Charles Creek in Alice Springs in 1936. Many Eastern Arrernte people were moved there. In 1940, after the outbreak of the Second World War, the Northern Territory Administration

moved the Mission to the abandoned gold mining town of Arltunga. Scarce and bad water supplies and widespread illness at Arltunga prompted the Little Flower Mission and Eastern Arrernte residents to move again in 1952 to where the current community of Ltyentye Apurte (Santa Teresa) is located.

In 1976 Arrernte people were given parts of their land back under the *Aboriginal Land Rights (Northern Territory) Act 1976*. The Santa Teresa ALT was granted. Loves Creek Station, established in 1896, was bought by traditional owners in 1993 and handed back in 2012.

First Stone Buildings – Santa Teresa

Note. From *Santa Teresa and East Aranda History, 1929-1988* (p.22), by Pye, J., 1989, Darwin: Colemans Printing. Copyright 1989 by Catholic Diocese of Darwin. Reprinted with permission.



The Aranda men, enjoying a day with the horses at Santa Teresa

Note. From *Santa Teresa and East Aranda History, 1929-1988* (p.24), by Pye, J., 1989, Darwin: Colemans Printing. Copyright 1989 by Catholic Diocese of Darwin. Reprinted with permission.



Fr Summerhayes, MSC Community Adviser, two OLSH Sisters, Sr Frances (Mawn), Sr Francisco (Mary McGowan) and School Pupils
 Note. From *Santa Teresa and East Aranda History, 1929-1988* (p.49), by Pye, J., 1989, Darwin: Colemans Printing. Copyright 1989 by Catholic Diocese of Darwin. Reprinted with permission.

Arrernte lands from different views

Arrernte land features ranges, rivers, springs and rock holes, and contains food and medicine areas. The song lines and sacred sites within the lands hold laws, ancestors, life stories and histories.

Arrernte people call their country *apmere aperta urrthe-arenye kenhe* (the country of the limestone people).² There are many limestone ranges and ridges in this country. Its limestone soils are soft. They can blow away like bull dust when damaged.

Scientists understand the country as spanning the eastern MacDonnell Ranges bioregion and the Simpson Desert bioregion.

The MacDonnell Ranges bioregion is characterised by high-relief ranges and foothills. Spinifex and acacias, particularly mulga, occur throughout the bioregion. Land tenure is Aboriginal freehold, pastoral leasehold and conservation reserve. Alice Springs is the major population centre. The main recognised industries are cattle grazing and tourism.³

The Simpson–Strzelecki Dunefields bioregion has the lowest rainfall in Australia. It's made up of long parallel sand dunes, fringing dune fields, extensive sand plains, dry watercourses and salt pans. Plants were mainly spinifex hummock grasslands with sparse acacia shrublands. However, these spinifex grasslands have been reduced and fragmented by wildfires.⁴ There are narrow river red gum and coolibah riverine woodlands that seasonally flood.

Lytentye Apurte is the major population centre and is surrounded by smaller Aboriginal communities such as Williams Well, Little Well

² Dobson and Nano 2005

³ Bastin 2008

⁴ Friedel 2013

and Mt Undoolya. Land tenure includes Aboriginal land, conservation reserves and pastoral leases. Oil and gas exploration is widespread.

In the MacDonnell bioregion, there are more than 200 bird species, more than 100 reptile species, mammals and approximately 1500 plant taxa.

In 2008, a National Rangelands audit documented that threatened animals include the brush tail possum, black footed rock wallaby, slater's skink, bush stone curlew and grey falcon on Arletherre ALT. Threatened plants included sickle-leaf wattle and glory of the centre. We know that black footed rock wallaby is still present on Arletherre ALT (Paddy's Rockhole and Rockhole Bore waterhole in 2020) and on Allambi Station (2021). We know slater's skink is still present near Atnarpa.

The Eastern Arrernte Dictionary is co-authored by Veronica Dobson. It includes lists of plants and animals important to Arrernte people, as well as many words, and knowledge relevant to looking after country and its plants, animals, waters and landforms. These are like an inventory of Arrernte lands.

Patricia Drover and Katherine Ryder watch a black-footed rock-wallaby near Limbla. Note: From Natural Resources of Loves Creek Station (p.33), Latz, p., Paltridge R. 2007.



Land management work, planning and actions: 1980s – 2020

Between the 1980s and 1990s, a Community Development and Employment Program operated at Ltyentye Apurte. Most of this work was within the community but also included cattle and horse stock work on country.

In the 1990s, CLC staff worked closely with traditional owners to map and describe the different types of country across Loves Creek Station. Past reports with photos give useful descriptions of each land unit along with the landform, soil, plants, water places and land management issues. Arrernte names for landforms, plants and animals are given. The report describes thirty different land units which indicate it is rich and varied country (see reports by T. Mahney and others (1995–1997), at Appendix 5).

A further eight reports were completed from this project. The main themes identified across Loves Creek were:

- Looking after water places
- Cattle management
- Outstation access, living and management
- Bush foods and animals
- Roads and visitors
- Protection and management of water places
- Important animals and their management
- Outstation maintenance.

In that era, Arrernte families looked after country by themselves but it became harder to visit and work on country. This was before an Aboriginal ranger program was established.

In the early 2000s, Veronica Perrurle Dobson worked with a CLC staff member, Ada Nano on a project about traditional knowledge and history of the parks in the eastern MacDonnell Ranges. Their report explains how and why

these parks are important to traditional owners. They talk about Anthwerrke (Emily Gap), Akapulye (Jessie Gap), Antenhengantenhe (Corroboree Rock), John Hayes Rockhole, Trepkina Gorge and surrounding areas. It notes the main song lines and sites, the important food and medicine plants and animals, and how these areas have changed compared to when Veronica was young. It also contains useful maps of food areas. Veronica and Ada developed lists of actions to better care for these areas.

In 2009, Kathleen Kemarre Wallace with Judy Lovell published a book called 'Listen deeply, let these stories in'. They wrote about Arrernte cultural life, dancing, spirits, rock holes, waters and special places. Their book contains stories, paintings and photos about family and ancestors, songs and stars. Kathleen's stories speak of the origins and beliefs of her family and other Arrernte people.

From the mid 2000s, the Dobson, Hayes and other families worked with Tangentyere Landcare, Greening Australia and CLC on projects related to springs and natural waters in the Ulampe Range on Santa Teresa ALT. Fences were built to keep horses and cattle out of some of the springs.

Elaine Gorey and other schoolteachers worked with Meg Mooney of Tangentyere to take school children on trips to learn about waters, plants and animals. Sometimes they were joined by water expert and aquatic ecologist, Jayne Brimbox. They made bi-lingual photo-books including a brief history of Hayes Springs, and an account of the beginning of land management work on the Santa Teresa Land Trust. The books include records of schoolchildren collecting small water animals with Jayne Brimbox to monitor water quality. Veronica Dobson wrote an important account of the cultural values and care of Hayes Springs,



Rangers Kelvin Kopp, Farron Gorey and Charles Lechleitner with Paul Box assisting in recording an elevation profile of the water source for a restoration survey at Marion Springs.

Mparntwenge, Salt Springs and Irlkerteye Spring. The Ltyentye Apurte Ranger group formed to continue and expand this work.

In 2006, the Santa Teresa ranger group evolved, in collaboration with CLC and Greening Australia, from the Santa Teresa Community Development and Employment Program (CDEP). It responded to traditional owner concerns about the condition of significant water sources and the need to protect waters from damage caused by feral animals and weeds. The scope of the ranger work broadened with CDEP and CLC support to also address feral animal management on the wider Santa Teresa Land Trust.

A permanent, cohesive and funded ranger group emerged in 2009. It was supported by the Indigenous Land Corporation (ILC) Real Jobs Program from 2009. The Ranger group is named 'Ltyentye Apurte', an Eastern Arrernte name for Santa Teresa. 'Ltyentye Apurte' means 'a stand of Beefwood trees' and refers to an important men's place north-west of Ltyentye Apurte community. In 2021, the ranger program was fifteen years old. Some Ltyentye Apurte rangers have been with the group since it began so they have a lot of knowledge and experience.

The Ltyentye Apurte Rangers are directed by a TORAC (Traditional Owner Ranger Advisory Committee) of six to ten traditional owners who meet two to three times per year. Their main jobs are to plan ranger work and advise and support the ranger group.

The rangers are residents of Ltyentye Apurte community. Some rangers are traditional owners for sites and song lines within the Ltyentye Apurte work region while some have traditional connections to other country in Central Australia.

In 2011, CLC contracted a rangeland ecologist, Hugh Pringle, to collaborate with traditional owners on land management planning for the

Santa Teresa region. He trialled the Ecosystem Management Understanding (EMU) mapping-based approach with Ltyentye Apurte Rangers. They identified land values and threats. Priority management areas were identified then specific projects proposed. For the Santa Teresa ALT, the following priority project areas were identified:

- Ulampe Range
- Two Paddocks
- Tooka Plain and Yam Creek

Ten key threats were named with the following project action objectives:

- 1. Minimise incursions from feral animals outside of the Land Trust**
- 2. Restrict access to water places by 'unmanaged or feral' livestock and horses**
- 3. Create yards to remove feral animals**
- 4. Clean out water places and weeds**
- 5. Reform access roads and tracks to spread water surface flows**
- 6. Provide visitor and camping facilities**
- 7. Encourage community engagement and school education**
- 8. Rejuvenate cultural practises and ensure old people can visit special places**
- 9. Minimise risk of broad scale intense fire and protect fire-sensitive habitats**
- 10. Rehabilitate where there has been extensive gully and track erosion.**

This was the first strategic level planning with the Ltyentye Apurte Ranger group for the Santa Teresa area.

The appendices accompanying this plan summarise eras of land management since precolonial times, and ranger works since 2010.



At Snow Bore, participants say and write what they want in this plan as facilitator's record.

About values, threats and strategies in this plan

Much of the content of this plan is taken directly from the words of *apmereke-artweye* and *kwertengerle* and reflects their views and aspirations. So, the facilitators wrote the values, threats and strategies of this plan in the first-person voice.

Next we talk about the good things on our country, the things we worry about and what we will do to make Arrernte people and country healthier.

Good things about our country: What we value

At the workshops, we spoke and wrote about the ‘good things’ in our country. Healthy Country Plans from other places in Australia, write about ‘values’, ‘assets’ or ‘targets’. In this plan, we call them ‘values’. These are the things to be made stronger and better through land care. Although values are presented separately in this Country Plan, many are connected and influence each other.

All values were grouped into eleven themes and seven were identified as priorities. They were ordered by how frequently people spoke of each during the workshops. The values are:

Value 1: Family connections, living and working on country

Value 2: Learning and teaching about country

Value 3: Rangers and the Ranger program

Value 4: Governance and working within Arrernte social systems

Value 5: Altyerre (Creation) places, spirits and ancestors

Value 6: Rain, springs and natural waters

Value 7: Bush foods, medicines, meat animals and native animals.

Other themes that people noted but did not talk about as much included:

- Enterprises and businesses
- Introduced animals – horses and others
- Fences, bores, troughs and tanks
- Cultural burning.

‘Family connections’ and ‘learning and teaching about country’ were talked about much more often (about 30% more) than the other themes. These seven themes are expanded in the next sections with direct quotes and explanations of why the topic is important to help make country healthier and actions or strategies that traditional owners and rangers have identified.

The strategies section gives more detail on the projects and actions. Also, there is additional information about them in the Santa Teresa and Ross River country reports.



Value 1: **Family connections, living and working on country**

Being out with my family on our homeland makes me very proud.

Paul Williams

Corkwood Bore family camp with AAAC

What makes me feel happy is taking family back to homelands to make a living. They can work on homelands and look after their land. It is important to look after the land and see what needs to be done.

Marlene Doolan

When you see country healthy and bright it makes people feel healthy. People get happy. There is kwatye (water) there, animals there.

Joe Palmer

The country we come from is a core part of our identity. Families together and living or working together on country is the number one good thing for healthy country. We feel good when we are together on the country of our ancestors and families. Knowledge about homelands, totems, Laws, stories, springs, and hunting grow from teaching and sharing on country.

It is important that we visit and live on our country. Being on country gives us a break from town and a break from obligations to others. Values like respect and generosity are learnt on country. Looking after country is important and gives us a sense of purpose and responsibility.

Country that is healthy with water and animals makes us feel healthy. Some of us would like to have businesses and enterprises on our country.

Value 2: **Learning and teaching about country**

My river is a clean one. I've swum in that river. There's a live snake in that water. The Dreamtime Rainbow Serpent. He won't bite me as I'm Countryman. I've got to teach my grandson.

Hayes and Johnson family

Working and teaching like junior rangers.

Justin Hayes

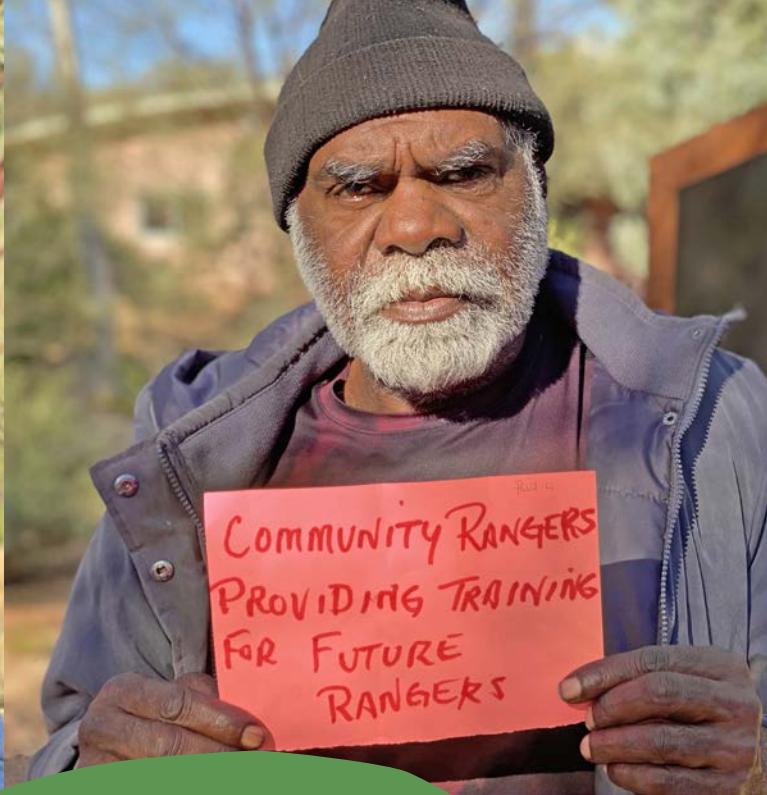
Country is a place to learn and teach. It is our second most important value in the land. There are many distractions for young people, and we worry that children are not learning enough about their country. To help make country healthier we all need to learn and teach about it, to know it.

We learn from our elders. They have a responsibility to pass on knowledge to younger people about their country. We want them to continue working with their families, with school children, with rangers and with junior ranger programs. Each upper generation teaches the younger generations, especially grandparents to grandchildren. Elaine Gorey is a retired schoolteacher. Several of the CLC rangers had been her school students; she is proud to have helped them learn.

We like it when the school links cultural programs into the curriculum.

Some rangers see teaching younger people as their most important job. Santa Teresa school used to have a country and culture program that linked to the school and national curriculum. Support for these programs comes and goes.

We want to see a Junior Ranger program established. We are familiar with this through CLC Ranger work and Northern Territory Parks although such a program has not operated on Eastern Arrernte lands.



Value: 3 Rangers and the ranger program

Traditional owners working as a team and talking to the rangers.

Jackson Kopp

At the final workshop the, people said or wrote on cards the number one top thing they wanted you to read in this plan. Left Damien Ryder. Right Paul Williams.

It's good to see the rangers taking kids out, junior rangers.

Gorey family

Today, the CLC Ranger program is a vital part of how we look after culture and country. We value the work that rangers do on behalf of *apmerek-artweye* and *kwertengerle*. Most of us live in communities or towns and do not have sufficient resources to regularly visit and look after our country. Our rangers respect and work with *apmerek-artweye* and *kwertengerle* according to our traditional laws.

Traditional owners guide the year-to-year work of rangers through the TORAC and rangers continue to learn about the country from traditional owners. The TORAC integrates traditional governance into the ranger program and supports the rangers to plan, organize and work together.

Rangers also consult and take traditional owners on most country trips. Traditional

owners are often paid by CLC and other organizations as supervisors, consultants and workers.

We have asked for these things to continue. We value rangers keeping us informed about the condition of the land when they do work on country. We also value rangers supporting us to teach our children and grandchildren about their country and culture.

We talked with the CLC about starting another ranger group to work across the wider Eastern Arrente region such as on Arletherre ALT. We like the idea of Ltyentye Apurte Rangers supporting a new ranger group.

Value 4: **Governance and working within Arrernte social systems**

Working together is important to me.
Charles Lechleitner

I love what I am doing
around here. I am so thankful
for the traditional owners
for making me feel at home
Kwementyaye Gorey

To have healthy country the ‘right people’ need to be involved in decision making, consultations and country visits. Strong knowledge is essential to looking after our country the right way. Being on country with old people is the best way that we learn.

The *Anpernirrentye* system links people to each other through kinship, and through *Altyerre* connections between places, plants and animals. It also indicates the right people to talk for country.

We want everyone who works on our country to understand, respect and work with *apmerek-artweye* and *kwertengerle* according to our customary governance systems. We value

strong cultural leadership to support new leaders because strong governance can help traditional owners make decisions about their country and reduce problems and arguments.

The Ltyentye Apurte Rangers have close working relationships with traditional owners. It is important that the rangers know the right people to consult in order to work together respectfully.



Sacred sites link us to our great great grandfathers and ancestors. Fenced sacred sites are really important .
Alan Drover and Michael Drover

Value 5: **Altyerre (Creation) places, spirits, and ancestors**

Bronwen Cavanagh

Sacred sites are important to the health of our country. They are the physical expression of the Altyerre, the source of all our laws and customs. The protection of sites and respect for the right ways to look after country underpins all of our work. The Altyerre defines the rights and responsibilities of *apmereke-artweye* and *kwertengerle*.

Many song lines criss-cross the Ltyentye Apurte Ranger work region. For example, a major Rain Dreaming travels through the springs on Santa Teresa Land Trust. Near Ross River (Inteye Arrkwe), the Seven Sisters travelled and created an important song line.

It is important to listen to older people to learn the stories and Laws of these places. We want our younger generations to know these stories, their meanings, the rules and proper conduct expected when visiting *Altyerre* places.

Value 6: Rain, springs and natural waters

We care about the water.
Gorey family

If there's no water nothing will happen. Water is the main one. Where the feed is too for kangaroos, perentie, birds.

Michael Hayes, Derek Johnson, Frieda Johnson, Kaylene Johnson

Left to right Faron Gorey, Derek Johnson and Anton McMillan at Rockhole Bore waterhole

Water is one of our most important assets. It is the number one resource that makes country healthy. Our ancestors relied on the waters of the land. Many of our waters are sacred. We want to continue caring for our natural waters today.

Animals on our country need drinking water. Plants, which provide shade, homes, and food for people and animals, also rely on water. Our water sources include rain; springs; waterholes; and places along creeks. Water can also be found in certain plants. Eastern Arrernte people continue to drink from these waters today.

Springs have special significance as the water should be there all the time and certain spirits

of the country reside in them. Caring for springs is very important work for traditional owners and rangers. Each spring needs to be cared for in its own way. Other water places such as rock holes and soakages also need attention.

On the Santa Teresa ALT these include Uyetye and the other springs on the Rain Dreaming song line. There are certain springs and waterholes in areas beyond Ross River that we also want to protect. We want to work with scientists to identify what is required for waters that have been damaged such as Itnwerrenge (Marion Springs).

Value 7: **Bush foods, medicines, meat animals and native animals**

Bush tucker, that's the main one. Goanna is number one. There's a season for all those things like Wild banana, Passionfruit, *Atwakeye* (Bush orange), *Utyerrke* (Wild fig). Bush medicine is still important. People still use it.

Michael Hayes, Derek Johnson, Frieda Johnson, Kaylene Johnson

What is good are the sacred land, the sacred trees, the tools, and remedies. The sacred plants.

Tyrone Wallace

Alangkwe (Bush Banana) is an important food and totem of *apmerekke-artweye*

Kere (meat) is important. Kangaroo is important. We don't shoot it for fun. We are thinking about our families to get for them kidney and *iyepelyepe* (intestine).

Jackson Kopp

Bush foods, meat animals and medicines enable us to live on the land and are also important Dreamings. They are part of Eastern Arrernte people and our culture. Without them the people and the country are not healthy. We visit country, take our children and grandchildren out and show them where to find these things.

Plants and animals live in different habitats and we know that some plants and animals come out in different seasons; others grow and do well after rainfall and the right weather.

Arrernte elders and ancestors grew strong on these foods and medicines. We want our children to know their Arrernte names, different uses, where and when to find them, how to prepare and use them, and their *Altyerre* stories. We want to take care of our native wildlife, bush foods and medicines.

More than fifteen mammals, birds and reptiles were eaten by our people. There are dozens of plant foods and many medicines (see appendices to the plan, appendix 2). Some animals classed as rare, threatened and endangered continue to be found on Aboriginal lands because they are less damaged by pastoralisation and development.

We like working with rangers to make bush medicines to share with families and aged and unwell people at Ltyentye Apurte. Rangers learnt from their families and older people and have made maps of areas where certain medicine plants are collected (see figure 10).

Veronica Dobson and facilitator Fiona Walsh talk about *Atheuge arlperle* (edible sap from ironwood tree).



Photo on right, top: Men talk about country on The Garden station. Near Mt Benstead waterhole.

Photo on right, bottom: Mapping places on country with workshop participants & facilitators at Ltyentye Apurte rangers shed.

Main worries about our country: threats

At the workshops we spoke and wrote about the things we worry about for our country. Healthy Country Plans from other places in Australia, refer to worries as ‘threats to country’. These are the things that weaken our country and sometimes ourselves.

The identified threats were grouped into themes. These are expanded in the next sections with direct quotes. The themes include an explanation of how addressing the threat helps improve the health of country. Threats are presented separately in this Country Plan. However, many are connected and influence each other.

All threats were grouped into eight themes. They were ordered by how frequently people spoke of each during workshops. They are:

Threat 1: Loss of respect, teaching and knowledge

Threat 2: Lack of access to country

Threat 3: Damage from introduced animals

Threat 4: Poor relations with neighbours and organisations

Threat 5: Dry times and climate change

Threat 6: Big wildfires

Threat 7: Erosion, deep gullies and soil loss

Threat 8: Buffel grass and other weeds.

Michael Drover






Threat 1: Loss of respect, teaching and knowledge

Land is the culture of people. The land is us. It is not just a piece of dirt.

Veronica Perrurle Dobson

It is hard to feel whole because unfortunately some culture has been washed away.

Tyrone Wallace

A photograph of an elderly Indigenous woman, Kathleen Wallace, sitting in a wheelchair. She has long grey hair and is wearing red-rimmed glasses and a blue and white patterned necklace. She is holding a white sign with handwritten text in blue ink. The background is a blurred outdoor setting with trees and a fence.

The Country Laws were given to my people through our beliefs. The *apmere-artweye* should teach the one youngs about our Laws. The skin names. *Apernirrentye*. They are losing this knowledge. It is important for the kids + young people to learn from our elders.
(Kathleen Wallace)

Kathleen Wallace

As *apmere artweye* and *kwertengerle*, one of our biggest worries is changes and threats to the knowledge, skills and practices that come from our senior people. We now live between the traditional and modern worlds. The gap between these ways of living seems to be increasing. Distractions such as television, internet and social media are keeping young people in town and in their communities and there are fewer opportunities for senior people to take them on country and teach them our language, history and culture.

Apmereke-artweye and *kwertengerle* work together to look after country. We worry that some younger people don't know about these relationships because they are not learning from older people. One of the biggest worries for traditional owners is that old people are passing away and stories and knowledge of country is being lost. Some young people don't

know where their *arrange* (father's fathers) country is, or how to recognise bush tucker plants.

It is challenging to preserve old ways in a world in which they seem to be less relevant to younger generations. We see that young people get distracted. We know some older people get sick, tired or troubled, so that it is hard for them to teach. We find that some organisations no longer take different generations together on bush trips. Children cannot learn about their country when only in the classroom.

If the next generation does not learn these things, how will they know where they come from, or how to care for their country?



Threat 2: Lack of access to country

Left to right Marlene Doolan, Veronica Doolan and Freda Johnson.

In the past traditional owners lived on and cared for their own country. Today, challenges in accessing country concern us. Much of our country is a long way from towns where many of us live and also encompasses areas that are now part of pastoral stations.

It can be difficult to visit country because many of us either don't have access to vehicles at all, or don't have suitable vehicles. Many of the roads to outstations, hunting grounds and picnic places are too rough for our cars. After rain, even roads that were in reasonable condition wash away. Poor roads mean that we cannot visit our homelands or take our children out on our country.

Access roads need to be regularly maintained so that we can continue visiting places that are important to us. Being able to visit sites supports us to maintain a connection and to teach younger generations about our land.

We are living too far away from our country. We need good motor cars and extra help to get there. It can be a long time between visits, and often we have not been to the countries of our grandparents for far too long. Some young ones have never seen the places and homelands of their family. To continue caring for and teaching our children about the land we must be able to live on or visit our country.

Threat 3: **Damage from introduced animals**

Cattle have bores and troughs but they walk around everywhere. You can't keep them away.

Kathleen Wallace

Uyetye was a main place and camping area, but it was ruined by cattle

Stanley Wallace

Introduced 'hard-hoofed animals' are a big problem. We understand that some people like having their own horses and cattle. Many traditional owners also prefer wild horses and cattle to be mustered and sold rather than culled.

Other feral animals such as cats, and dogs are meat-eaters which kill native animals. Herbivores eat the grasses and plants and damage springs and other water sources. Hard-hoofed animals also create pads that cut the soil, so that it washes away and causes erosion. Horses, cattle and other hard-hoofed animals eat or trample bush food plants, they spread weeds and more. For the land to be healthy, the springs and other water sources must be healthy.


Introduced animals have reduced the numbers and health of bush resources over our lifetimes. We are concerned that many important foods and animals are becoming fewer. There are fewer large animals such as red kangaroos,

Iperte Uyerrerie spring polluted by many dead and dying horses in the extreme hot period of 2019.

euros, echidnas and goannas than there used to be. We don't see many of the smaller animals anymore and the country where they used to live is bare.

Bush tucker plants used to grow back after a little rain, even during drought. In the sandhill country there was plenty of bush foods such as bush potatoes, bush melons and mushrooms. Introduced animals eat and trample bush tucker and other native plant species. They spread weed seeds and cause erosion. As a result, bush medicines that used to be plentiful are also hard to find. Also, there is not enough bush tucker to support important animals such as emus. This worries us because we can't teach our children about them.

We are also worried because cattle, horses and camels are wrecking old peoples' drinking waters across the land. They break fences that we put up to protect important sites on country to get to water.



Neighbouring stations don't listen when Arrernte people talk about burning. They get cross if people burn on the Land Trust.

Charles Lechleitner

Threat 4: **Poor relations with neighbours and organisations**

A locked gate to an outstation on Arrernte Custodial lands, Arrernte people cannot go through.

Our traditional country also encompasses surrounding pastoral leases and Northern Territory Government managed parks. It is not restricted to Aboriginal Land Trusts where the rangers work. Poor relationships with neighbours are a concern for us. For example, sometimes neighbours lock gates. Then we cannot get to country to teach younger people.

It is difficult for us to access country on pastoral leases as there are a lot of rules we must follow. We often encounter locked station gates which prevent us from visiting our country and caring for important places. We respect that pastoralist don't want the cattle to get out. We would shut gates and tell other people to shut gates.

Some station managers around Santa Teresa ALT do not like non-Aboriginal staff accompanying Arrernte people on country visits. This makes it difficult for the Santa Teresa School to take children on excursions to culturally important places on neighbouring pastoral leases.

Another matter with neighbours is the maintenance of fence lines and management of cattle, horses, fire breaks and cultural burning on country. Station owners often do not listen to traditional owners and rangers and sometimes get cross when we contact them about burning on ALTs.

In the past we have worked closely with external organisations and stakeholders and we appreciate opportunities for employment and collaboration in caring for country under Joint Management agreements. When we have good relationships with other organisations we can share resources and equipment. These organisations include Atyenhenge Atherre Aboriginal Corporation (AAAC), the Santa Teresa School, MacDonnell Shire, Akeyulerre Healing Centre, Northern Territory Parks and there are others too.

When we all work well together, we can look after our country the right way and have healthier country and people.

Threat 5: **Dry times and climate change**

Climate change has destroyed everything like bush foods.

Gorey family

Too dry for kangaroos. Less rain, rivers used to run for longer. Climate change is making it drier.

Michael Drover, Alan Drover, Farron Gorey, Michael Taylor

Climate change is one of our main worries as we are people who live closely connected to our country. Traditional owners and rangers are seeing the effects of the changing climate. We feel our land is changing quickly. It is drier and hotter and sometimes there are bigger floods.

There are many significant springs and natural waters within the Ltyentye Apurte Ranger region. These are important places as they are habitats for plants and animals, important camping places and *Altyerre* sites. Today the country is too dry, water places are dry, and some do not look as healthy as they used to be.

Research up to 2013 by scientists and Ltyentye Apurte rangers tells us that there will be:

- more very hot days (days > 40°C)
- more very hot days in a row, day after day
- heavier rains and more floods, but rain will fall less often
- hotter so drier months and years between big rain fall years
- rain at different times compared to the past i.e., more hot season rains, less cool season rains
- less days with frosts.

This is consistent with the 2022 IPCC report. Increasingly hot weather and variable rainfall may reduce the time we can spend on country, make it more challenging to live on country. Changes in the weather also affects the health of bush foods and medicines.

There are fewer bush foods around than there used to be in the past. We notice some species are not emerging in the seasons when we expect to see them. The scarcity of bush foods means they are not there for us to teach younger generations about them.

There seems to be less rain, the rivers are not running for as long, springs are drying and trees dying. Tree roots from which people obtain water from are dry. In the future, country and our water places will be drier and suffer more erosion through heavier but less frequent rainfall.

Indigenous people across Australia are talking and planning more for climate change. In 2020 our CLC delegates said they wanted more information on climate change and water security. These are two of their biggest concerns.

Climate change is too big a worry for traditional owners and rangers to deal with on our own.

Threat 6: **Big wildfires**

There needs to be firebreaks between Land Trusts and Pastoral Leases. Think about weather for burning. I have a lot of experience of back burning.

Paul Williams

Example of how uncontrolled hot fire can damage country and sites.

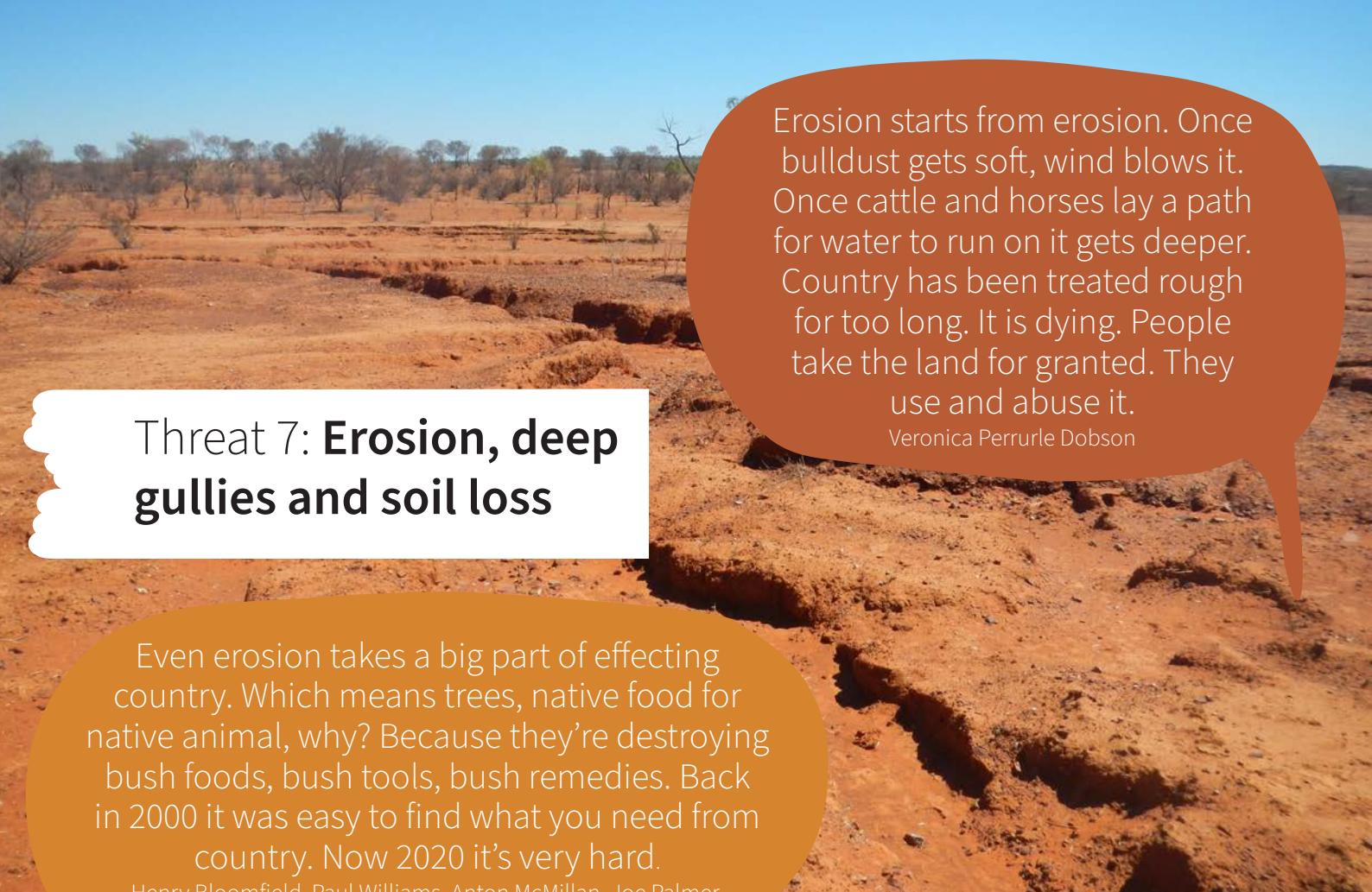
Burning needs to be done... Old people know the right way, but younger people aren't learning from them. We need to keep that burning going in the right time of day and year... Start with small areas and bring back bush plants. Rangers need to have confidence.

Unnamed group

Our ancestors walked the country and made careful fires. They used fire to hunt animals, to help things to grow well and to communicate with each other. Each of their bushfires were very small, less than a few hectares. Patchworks of burnt areas and regrowing plants were spread across our lands.

Burning practices changed when pastoralists with cattle and horses came to our country. Aboriginal people got into trouble if they burnt country. We have lost a lot of knowledge about the skill and practice of burning and we are worried that we are not learning cultural ways of burning.

Today, wildfires are a huge threat to the health of Eastern Arrernte country. Woody thickening of country blocks access to places and uncontrolled wildfires can easily get out of control, wipe out bush tucker and burn infrastructure. Buffel grass is a major problem as it is very difficult for people to manage and control fires in buffel grasslands. Also, climate change causes hotter and windier conditions. It makes it even harder for people to manage fires.



Threat 7: **Erosion, deep gullies and soil loss**

Erosion starts from erosion. Once bulldust gets soft, wind blows it. Once cattle and horses lay a path for water to run on it gets deeper. Country has been treated rough for too long. It is dying. People take the land for granted. They use and abuse it.

Veronica Perrurle Dobson

Even erosion takes a big part of effecting country. Which means trees, native food for native animal, why? Because they're destroying bush foods, bush tools, bush remedies. Back in 2000 it was easy to find what you need from country. Now 2020 it's very hard.

Henry Bloomfield, Paul Williams, Anton McMillan, Joe Palmer, Damien Ryder and Tyrone Wallace

Erosion gullies on Santa Teresa Land Trust.

Once our land was soft with a thin skin like crust. Now it is harder and drier in parts and washing away in others. Limestone country with soft fine soil is easily eroded.

Erosion is caused by over grazing by cattle and horses. Their pads create new pathways for water to flow along. Car tracks in the bush also cause erosion in a similar way. Erosion gullies are a danger to people when driving in thick grass.

Buffel grass and heavy rainfalls increased by climate change contribute to erosion. Buffel grass clumps make water flow in narrow channels. Whereas native grasses help to spread water so it soaks in. Erosion makes it more difficult for native plants to grow. Native animals that depend on native plants lose their food so cannot thrive.

Where cattle and horses have removed most grasses and soil is bare then buffel grass may slow but not stop erosion.

There is erosion in many areas of our country. Erosion is a serious problem on the Santa Teresa and Arletherre ALTs as well as the wider area. It is taking away the soil and changing the landscape and flows of water. Erosion causes rainwater to flow away rather than soaking into the soils. We have seen deep and wide gutters and gullies form where soil has washed away after rain. Rangers have helped grade roads in the past and know that not all erosion management methods have been effective, but they have had some experience using erosion control methods.

Yam Creek is one particularly degraded area near Ltyentye Apurte. We call it the 'grand canyon'. We worry it will grow until it cuts off the main road into our community. Another bad erosion area is near Pulya Pulya Dam on Arletherre ALT. We can do some things ourselves, but others are too big for us to tackle on our own.



Threat 8: **Buffel grass and other weeds**

Buffel grass is taking over and killing native plants.

Michael Drover, Alan Drover,
Farron Gorey, Michael Taylor

We don't see *Yalke* (Bush onion).
Alangkwe (Bush banana) is getting
strangled.

Kathleen Wallace

Thick buffel grass between Snow Bore and Uyetye.

Introduced weeds cause a lot of problems on our country. Traditional owners and rangers have seen that buffel grass and other weeds have increased and are pushing out native plants.

Many of the native grasses and bush foods that we used to collect such as *yalke* (bush onion), *alangkwe* (bush banana) and *arrutnenge* (bush passionfruit) have become very scarce; they are hard to find today. The small animals such as birds that eat the seeds of native grasses are all declining too. There is too much buffel and couch grass on the riverbanks and bulrush are choking some springs.

Buffel was introduced with camels and cattle. Now it is everywhere, it grows thickly and makes it hard for us to walk and drive on our

country. It damages our important cultural places and waters. Buffel grass is a major environmental and cultural weed in Central Australia and is dangerous to people, our homes, and our country. Buffel burns fiercely, higher and hotter than native grasses.

Buffel is not a declared weed because it has value as feed for cattle, horses, and the pastoral industry. Some traditional owners want to see buffel controlled.

There are also wattle plants that are getting thicker on Arletherre ALT (Loves Creek). These make it harder to get to areas of country and can cause problems with wildfires.

Alkwerterre north of Bloomfield's Bluff, here two men were drinking. Now their shield remains there. This used to be a long everlasting waterhole.



Strategies: to make our values stronger and to reduce threats

At the Santa Teresa and Ross River Healthy Country Planning workshops we talked about the things we value and the threats we worry about. We then talked about what we can do to look after the things we value and to reduce the threats to our country and culture. In this plan, these are called 'strategies'. Strategies are the work we want to see done by ourselves, rangers and/or others. The strategies are a guide to developing actions.

Our strategies are like a map to enable us to achieve our goals for healthier people and country. The plan also sets out how we will monitor our progress towards reaching our goals. We want to protect the values that are at greatest risk and deal with the most severe threats first.

Our strategies are divided into two parts. The first, 'Healthier people connected to country' sets out how we will support and improve our access to country and teach cultural and land-based Arrernte knowledge to younger generations. The second part, 'Healthier country' details how we will maintain the things that are important to us on country and address the worries we have for our land, plants, animals and waters.

We talk about the connections between people and country because it reflects our *Anpernirrentye* worldview.



Kwementyaye Gorey, Kathleen Wallace, Freda Johnson, Marleen Doolan, Ursula Johnson, Veronica Doolan, Kaylene Webb.

Goal 1: STRONGER FAMILY CONNECTIONS, LIVING AND WORKING ON COUNTRY

STRATEGIES – What we will do

- Support maintenance of outstations through minor work such as burning firebreaks and maintain existing fences, so that people can live on country and be healthier.
- Maintain relationships with service providers so everyone knows who is doing what to help maintain outstations.
- Rangers and CLC staff work with traditional owners to identify roads and tracks that need repair and maintenance and look for ways to make this happen.
- Establish outstation-based visits, and visits to surrounding sites for extended periods with traditional owners paid as supervisors.
- Work with schools to develop and strengthen a Junior Ranger program to train our children to be future rangers.
- Experienced Ltyentye Apurte rangers work with younger people to teach them about work on country.
- Establish a work experience program for older students or early school leavers supported by traditional owners and rangers.

INDICATORS – Measures of our progress

- By 2026, rangers will assist with minor infrastructure and road maintenance. They will support traditional owners to seek assistance from service providers for larger infrastructure matters.
- By 2024, rangers will support back to country visits.
- By 2024, the rangers will have strengthened relationships with the school and supported student learning as possible
- By 2028, the rangers have developed a work experience program for younger Arrernte people.

When we see country healthy and bright it makes us feel healthy and happy. Being out with our family on our homelands makes us very proud.

Paul Williams

All the roads need to be graded. Creek is too rough, needs grading because that's the road we use for camping with kids and for homeland visits

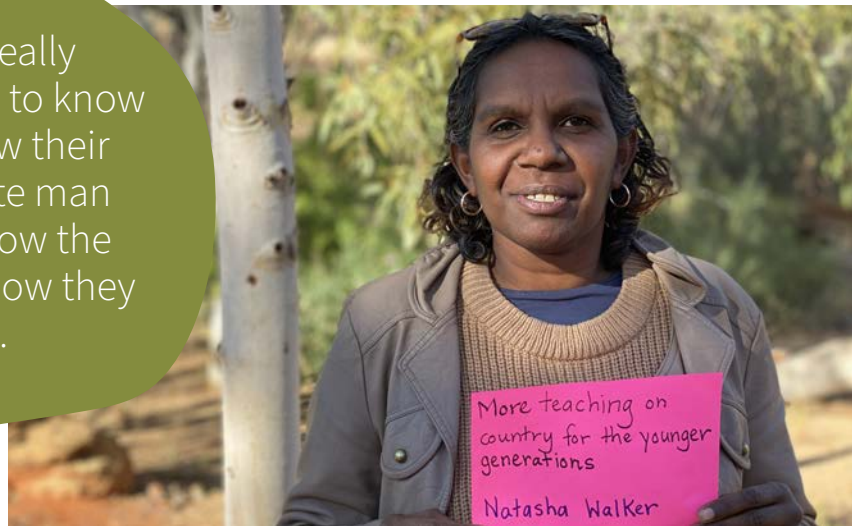
Gorey family

Track South-East to Ltyentye Apurte.

To teach children is really important. I need people to know about these things, how their family lived before white man came. They need to know the history of their people, how they lived on the land.

Kathleen Wallace

Natasha Walker



Goal 2: PEOPLE KNOW AND TEACH KNOWLEDGE AND STORIES OF THEIR COUNTRY

STRATEGIES – What we will do

- The rangers and traditional owners continue to support intergenerational learning and teaching.
- Senior traditional owners, rangers and others as appropriate to visit the Strehlow Research Centre annually to learn about sites, stories and family history.
- Support people to learn and teach cultural knowledge. Integrate findings from the CLC Reading the Country and tracking project (2019 –2022) into teaching processes.
- Record senior people telling stories and sharing knowledge they hold.
- Identify and implement ways to store and archive information about country, bush foods, medicines and the ranger program for use by younger generations.

- Continue to take school children on country trips and camps and present talks to Santa Teresa School students.
- Share the ‘traditional owner country reports’ and this overall plan with the Santa Teresa School.
- Contribute to two-way learning in the Santa Teresa School curriculum.

INDICATORS – Measures of our progress

- Between 2024 and 2032, as demonstrated by the numbers of country visits and resources produced, greater value is placed on the knowledge of elders and senior people and transmitted to younger generations on country and in classrooms.
- Each year between 2024 and 2032, the rangers have identified then recorded people telling stories and sharing knowledge.
- By 2028, a functional archive system will be implemented.
- Each year between 2024 and 2032, traditional owners and rangers visit the Strehlow Research Centre and the AIATSIS Alice Springs Engagement and Digitisation Centre.
- By 2026, school children’s cultural learning is stronger as demonstrated by the school cultural curricular content and country visits.
- By 2032, the rangers have regularly been on country visits with school groups.

Goal 3: RANGERS AND TRADITIONAL OWNERS ARE STRONGER TOGETHER

STRATEGIES – What we will do

- Maintain and develop the TORAC through governance training, workshopping and preparing better for meetings and explore ways the TORAC can lead the program in their way to keep traditional governance practices strong.
- *Apmereke-artweye* and *kwertengerle* work together and lead the work of rangers.
- Rangers continue to report on the condition of country and their work to traditional owners and act on their priorities.
- Develop a place-based map that interprets this country plan to make it more accessible to all traditional owners and community members.

INDICATORS – Measures of our progress

- Between 2024 and 2032, the ranger program is continued, strengthened and expanded.
- Between 2024 and 2032, *apmerek-artweye* and *kwertengerle* work together and lead the work of rangers. The TORAC is maintained and developed to better own the ranger program
- By 2024, a poster version of this plan is finalised
- By 2024, the HCP and products such as the HCP poster are further developed and regularly used by rangers and traditional owners.
- By 2024, products from this plan have been produced, seen and used by all rangers and traditional owners.
- By 2025 CLC will conduct a mid-term review of the plan to check that goals, strategies and indicators are being addressed.

It is the role of *kwertengerle* to look after the paintings with the rangers' assistance.

Anton McMillan and Kwementyaye Wallace

Today, rangers are somewhat equivalent to *kwertengerle*. It is good for rangers to learn about country and meet other families.

Damien Ryder



Derek Hayes

Goal 4: A NEW RANGER PROGRAM IS ESTABLISHED FOR THE WIDER LTYENTYE APURTE RANGERS WORK REGION.

STRATEGIES – What we will do

- Explore the possibility of establishing a new ranger group to work across homelands and land trusts east of Santa Teresa ALT. This new group could be supported by the Ltyentye Apurte Rangers so that new rangers can learn about their work.
- CLC and traditional owners develop a proposal to obtain funding for a new ranger group on Eastern Arrernte lands.
- Ltyentye Apurte Rangers continue working in the wider region and support those involved in a potential new ranger group.

INDICATORS – Measures of our progress

- By 2024, decide on the viability of new ranger group proposal.
- If viable, by 2030, a new ranger program for the wider Ltyentye Apurte rangers work area is established.



Stanley Wallace



CLC needs to liaise with neighbours on stations in relation to cattle fences, wildlife, buffel grass spreading, access to sites. Traditional owners have tried but we are not listened too

Veronica Perrurle Dobson

Joint Management fire planning meeting at Trepina Gorge Nature Park.

Goal 5: WE HAVE GOOD AND RESPECTFUL RELATIONSHIPS WITH NEIGHBOURS, ORGANISATIONS AND OTHER LAND USERS

STRATEGIES – What we will do

- Rangers to assist CLC Land Management to identify and develop memorandum of understandings (MOUs) to support working relationships with relevant stakeholder organisations.
- Design and install signs to provide information to other land users (e.g. tourists, pastoralists) about land tenure, outstation locations, road directions and/or access restrictions.
- Rangers assist CLC to develop simplified rules for access rights to pastoral properties under relevant legislation.
- Rangers work with CLC staff to find ways to improve communication and cooperation between Pastoral Lease holders, traditional owners, rangers and CLC. This will assist managing cross tenure issues such as cultural burning, managing firebreaks, feral animals and fencing.

- Collaborate with pastoralists to reduce cattle incursions, burn firebreaks and maintain boundary fences.

- Engage with NT Parks to carry out shared projects on parks and reserves to support Joint Management.

INDICATORS – Measures of our progress

- By 2028, improved relationships with neighbours, organisations and other land users.
- By 2024, traditional owners will have a better understanding of their rights of access to pastoral land.
- By 2026, traditional owners and rangers will have better communication and access to neighbouring pastoral stations for cultural activities.
- By 2026, there are stronger linkages with employment service providers that include work activities alongside the rangers.
- By 2026, resource sharing agreements are in place with identified organisations e.g., Shire grader is used for soil erosion works.
- By 2028, information signs are in place where needed.

- By 2032, boundary fences are in better condition, stray cattle are reduced, and fire breaks are burnt.

- By 2026, the rangers have collaborated in the development of projects on Northern Territory Parks.



Derek Johnson

Goal 6: ARRERNTÉ GOVERNANCE IS STRONG, AND WE WORK WELL WITHIN ARRERNTÉ SOCIAL SYSTEMS

STRATEGIES – What we will do

- Find and facilitate relevant two-way governance training for TORAC members to strengthen their ownership and control of the ranger program.
- Land management staff are formally inducted into Arrernte governance practices:
 1. Ensure TORAC members are on interview panels, spend time with and provide cultural induction to new staff members
 2. Traditional owners develop an induction process in collaboration with CLC staff.

INDICATORS – Measures of our progress

- Between 2022 and 2032, the practices of traditional governance and participatory decision making continue to be a key part of TORAC functions.
- Between 2022 and 2032, the rangers continue to work together with *apmereke-artweye* and *kwertengerle* in consultations and on country.
- By 2024, there is a two-way cultural induction program for new rangers and land management staff.



Ltyentye Apurte TORAC meeting.

Goal 1: SPRINGS AND NATURAL WATERS ARE CLEANER AND DEEPER

STRATEGIES – What we will do

- Prioritise the most important sites and waters to work on
- Traditional owners and rangers visit, monitor, clean and maintain the important springs and other waters.
- Remove and exclude horses and other feral animals from the springs including by fencing and best practice feral exclusion strategies.
- Maintain bore waters for meat animals and other native animals and set priorities for which bores the rangers could fix or maintain.

INDICATORS – Measures of our progress

- By 2026, all the important waters have been identified and the ones to work are prioritized (see Appendices to the Plan, Appendix 1).
- By 2028, the rangers have taught Arrernte school children and younger people about springs and natural waters.
- By 2028, exclusion fences or other management strategies are in place to block feral animals from important waters.
- By 2032, priority water places have been visited and cleaned.

For a long time, I worried about the ancestral waters. We had them before water from a tap. I worried for the springs and damage to them. Damage from drilling, cattle, horses, no one looking after. So, the [early rangers] began fencing then we began water monitoring with the scientists from about mid 2000 to now.

Veronica Perrurle Dobson



Rangers building a fence at Oolera Spring.

Goal 2: FEWER INTRODUCED ANIMALS ON OUR COUNTRY

STRATEGIES – What we will do

- Members of the ‘horse committee’ for Santa Teresa ALT include rangers and traditional owners. They continue to participate in and contribute to meetings.
- Rangers assist by educating traditional owners and community members about damage caused by horses and other introduced animals and potential remedies.
- Rangers assist CLC staff to develop a horse management plan for Santa Teresa ALT.
- Rangers assist with culls through public information, ground mustering and trapping, traffic control and other relevant tasks.
- Rangers and horse owners’ work together to maintain fences and gates and keep horses out of erosion management and restoration areas.

INDICATORS – Measures of our progress

- By 2024, a horse and cattle management plan has been prepared by the Ltyentye Apurte committee and CLC.
- By 2030, consultations about horse and cattle management on the ALTs in the wider Eastern Arrente work region have occurred. By 2032 consultations have been completed with some of the recommendations actioned.
- By 2032, the horse and cattle management plan has been implemented for Santa Teresa ALT.

Cattle stamped on everything on the land. I don't think it's good. They're destroying everything on the land. They're destroying all our history.

Kathleen Wallace



Horses by road, roam freely on Santa Teresa ALT along with cattle which enter from neighbouring stations.

I feel for the country because it is suffering. We're losing plants that people could use for food and medicine. We are losing animals like Emu, Kangaroo, Turkey, Hill kangaroo.
Veronica Perrurle Dobson

Atywenpe (perentie) is an important Arrernte food, ancestor and totem.



We got a season chart, and we all know what time bush foods come. There's no *Alangkwe* (Bush banana), *Yalke* (bush onion), *Atwakeye* (Bush orange), *Arlateye* (Pencil yam).
Gorey family

Goal 3: MEAT, PLANT, AND OTHER NATIVE ANIMALS AND RESOURCES ARE HEALTHIER

STRATEGIES – What we will do

- Strengthen knowledge and practices to find, harvest, prepare and share bush medicines and foods (see appendix 2).
- Rangers to take older people on country visits to collect and share bush foods.
- Refine existing maps of bush medicines areas made by Ltyentye Apurte women rangers and make new ones.
- Survey and monitor trends of important food animals and plants, medicine species and endangered animals by combining consultation and biological surveys. If traditional owners say populations are declining, then identify options for management actions.
- Make posters and maps of meat, plant food, bush medicines and other important resources to use as teaching aids.

INDICATORS – Measures of our progress

- By 2024, rangers and traditional owners have identified and documented those species requiring protection measures.
- By 2032, important bush foods, meat animals and bush medicine are healthier and more abundant in areas identified for protection.
- By 2032, native animal numbers and distributions appear to stay steady in dry times or increase in rain times in areas identified for protection.
- Between 2022 and 2032, endangered and native animal populations are steady or increasing in population size and condition.

Goal 4: *ALTYERRE* (CREATION) PLACES ARE ALIVE

STRATEGIES – What we will do

- Traditional owners take part in all ranger work to visit and protect *Altyerre* places (including rock art sites).
- Teach younger people about *Altyerre* places, their stories, story lines, connections to sites and respectful behaviour toward sites.
- Prioritise and implement the actions identified in the table of places (Appendices to the Plan, Appendix 1).
- Work with other rangers and scientists to train and learn about rock art and its preservation.

INDICATORS – Measures of our progress

- Between 2024 and 2032, the actions identified in the table of places are addressed.
- By 2028, a management plan for important *Altyerre* places is developed and implemented.
- By 2032, younger generations know more names, locations, and stories of *Altyerre* places compared to 2022.
- By 2032, threats to identified rock art sites from water, bird and feral animal damage are reduced.

At Hnwerrenge (Marion Springs), was good spring water, rock art and strong *Altyerre*. Left to right, Yellowshirt, Joe Palmer, Michael Cawthorn, Veronica Dobson.



Cultural places, sacred sites and all. Some people's dreaming is *Yalke*, Kangaroo, Emu. It's connected to the country. These plants and animals are important. Not just for bush tucker but for family and country.

Gorey family

Goal 5: BUFFEL GRASS AND OTHER WEEDS ARE REDUCED

STRATEGIES – What we will do

- Develop and implement an action plan to manage buffel grass and other weeds.
- Show traditional owners and rangers land care areas where long-term buffel grass control has helped native plants and animals to return.
- Identify and train rangers in best practice buffel control strategy methods.
- Select highest priority sacred trees and food or medicine resource patches in which to thin buffel and protect them from fire.

INDICATORS – Measures of our progress

- By 2026, rangers have best-practice skills and equipment to manage weeds.
- By 2026, fence one *yalke* (bush onion) area close to Ltyentye Apurte. Keep it clear of buffel as a seed bank and demonstration area (about one hectare).
- By 2032, buffel grass and other weeds are reduced in important places.

Native grasses are getting wiped out. Now there is buffel grass and couch grass. Small animals, birds that eat the seeds they are all declining.

Veronica Perrurle Dobson



Athel Pine trees are a weed plant.

Goal 6: EROSION, DEEP GULLIES AND SOIL LOSS ARE REDUCED

STRATEGIES – What we will do

- Incorporate improved erosion control as a goal of wild horse management plans. Exclude horses and cattle from paddocks where ponding banks have been built.
- Review erosion work over the past two decades to identify best practices and make recommendations on future works.
- Apply erosion control practices e.g., not driving on muddy and wet tracks, track grading so side drains flow well, low windrows, whoa boys installed.
- Continue to maintain and install long, low ponding banks. These should be high upslope and follow the contour lines.
- Use natural erosion control methods to mitigate erosion where possible

INDICATORS – Measures of our progress

- By 2026, erosion control is identified as main value in the horse management plan.
- By 2028, best practice methods in erosion control are identified and applied.
- By 2032, erosion in valued areas is slowed and reduced.

After more than ten years of erosion control work, there has to be less horses otherwise us rangers are wasting our time trying to control erosion.

Charles Lechleitner



Use of Bobcat to repair erosion control banks on Santa Teresa Land Trust.

Goal 7: COPING WITH DRY TIMES AND CLIMATE CHANGE

STRATEGIES – What we will do

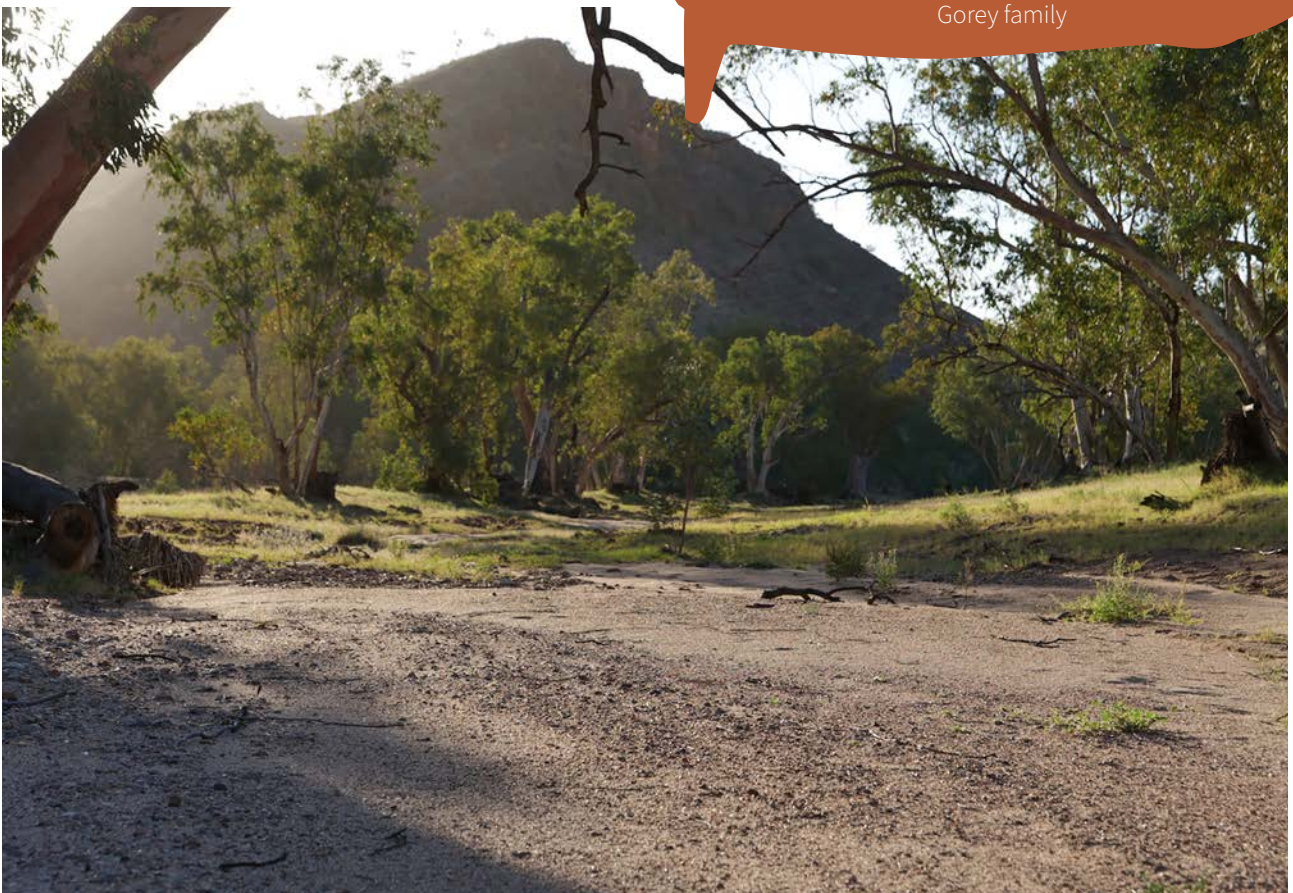
- Share experiences of climate change and its effects country with other Aboriginal groups and CLC delegates.
- Learn more about climate change and coping strategies across Central Australia and in other arid regions.
- Speak with West MacDonnell Shire, Territory and federal governments about working together to cope with climate change e.g., improve tree planting, shade provision, more appropriate housing.
- Use the book about climate change made by rangers in 2014. Update it and make another climate change education book for school children and other people.
- Adapt ranger work to hotter conditions including identifying jobs rangers can do indoors and work hours to suit conditions.

INDICATORS – Measures of our progress

- By 2026, rangers and traditional owners are better informed about climate change and coping strategies.
- By 2028, ways to live and cope with climate change have been identified and implemented.
- By 2028, ranger work is reviewed and adjusted where possible to accommodate climate change e.g. work hours and indoor tasks.

Climate change has destroyed our land. We can't even get sugar bag. We know the seasons and what time things should come out but there's nothing for kids. Nothing for us to show them.

Gorey family



On Ross River, downstream from Alkertere which once had an everlasting pool.

Goal 8: FEWER BIG WILDFIRES AND MORE CULTURAL BURNING

STRATEGIES – What we will do

- Develop a fire management plan for the region.
- Increase ranger training focused on cultural burning rather than aerial burning.
- Rangers will continue to seek permission from traditional owners and also work with neighbours before burning.
- Undertake cultural burning on Eastern Arrernte ALTs.

INDICATORS – Measures of our progress

- By 2024, a baseline for fire frequency and damage caused by fire across the ranger work region has been identified.
- By 2028, a cultural burning program has been implemented.
- By 2028, large wildfires have been limited due to cultural burning and break burning.
- By 2028, aerial incendiary burning is limited to areas where it is not practical to burn from the ground.
- By 2028, fire breaks between ALTs and neighbouring properties have been established.

There needs to be firebreaks between Land Trusts and Pastoral Leases. Think about weather for burning. I have a lot of experience of back burning.

Paul Williams

Right-way fire brings back all our plants and animals and makes country healthy.

Alan Drover, Shorty Mulladad, Michael Drover, Stanley Wallace, Derek Johnson, Michael Hayes and Paul Williams



Paul Williams at a camp along the Madigan track, upwind of small quiet burns he lit.

Traditional owners, rangers and others at the workshops

We can be grouped by family, or by men and women, or in other ways. Here we are listed in alphabetical order.

Traditional owners at workshops

Alan Drover (Yellow Shirt)

Annie Ryder

Kwementyaye Wallace

Dwayne Alice

Derek Hayes

Derek Johnson

Damien Ryder

Deanara Wallace

Elaine Gorey

Frieda Johnson

Henry Bloomfield

Justin Hayes

Jeremy Williams

Kathleen Wallace

Marlene Doolan

Malcolm Hayes

Mia Mulladad

Michael Drover

Michael Hayes

Natasha Hayes

Nora Hayes

Phillip Gorey

Paul Williams

Kwementyaye Mulladad

Stanley Wallace

Tyrone Wallace

Ursula Johnson

Veronica Doolan

Veronica Perrurle Dobson



CLC Rangers

Anton McMillan
Kwementyaye Gorey
Charles Lechleitner
Farron Gorey
Jackson Kopp
Joe Palmer
Keith Gorey
Kelvin Kopp
Malcolm Hayes

Other CLC staff

Chris Thompson
Joanna Shand
Martin Campbell
Michael Taylor
Peter Worsnop
Tom Ruggles
Sanchia Scott

Facilitators and report compilers

Fiona Walsh
Michael Cawthorn

Apmereke-artweye and kwertengerle and CLC staff and facilitators at the final review workshop of the Eastern Arrernte country plan, 2021. (Absent: Alan Drover, Paul Williams, Marlene Doolan, Veronica Doolan, Peter Worsnop, Martin Campbell)



Relevant books, reports and films

These include references written by traditional owners, rangers, and their collaborators. Internal or unpublished reports by CLC and others are listed in Appendices to the Plan, Appendix 5

Akeyulerre Healing Centre (2020). *Akeyulerre Healing Cards: Healing stories about our medicine plants*. Akeyulerre, Alice Springs.

Bastin, G. (2008). 'Taking the pulse, about environment and economic change', in *Australia's rangeland bioregions*, CSIRO Land and Water.

Brimbox, J., Dobson, V., Mooney, M. and Dobson, V. (2007). 'Hayes Springs, Mparntwenge, Salt Springs, Irlkerteye: 2-way approach to survey and manage central Australian waterbodies', *Report to the Natural Resource Management Board (NT) for NT RIS Project No. 2007/154, IEK for Natural Resource Management - Pilot Projects - Integration of IEK into mainstream NRM activities* (PROGRAM 1A).

Dobson, V.P., (narrator); Walsh, F. (director); Sati, W. (editor) (2008). *Anpernirrentye Relationships between bush foods, creation laws, people, country and all things: illustrated by three plants* (video 13 min 22 sec), CSIRO and Desert Knowledge CRC, Alice Springs.

Dobson, V.P., Walsh, F. and Douglas, J. (2008). *Anpernirrentye Relationships between bush foods, creation laws, people, country and all things* (poster), CSIRO and Desert Knowledge CRC, Alice Springs.

Dobson, V.P. (2010). *Caring for Country: Hayes Springs, Mparntwenge, Salt Springs, Irlkerteye in IEK (Indigenous Ecological Knowledge) for Natural Resource Management - Pilot Projects - Integration of IEK into mainstream NRM activities: A 2-way Approach to Survey and Manage Central Australian Waterbodies*. Unpublished report, NT Dept of Natural Resources, Environment, the Arts and Sport to the Natural Resources Management Board (NT) for NT RIS Project No. 2007/154.

Dobson, V.P. and J. Henderson (2013). *Anpernirrentye - Kin and skin: talking about family in Arrernte*, IAD Press, Alice Springs, 128 pages.

Friedel, M. (2013) A million years of change: wind, flood and fire in the Simpson Desert, Australian Rangeland Society's Rangeland Lecture for 2013, Desert Knowledge Precinct, Alice Springs, <https://www.youtube.com/watch?v=xy7FuYLGvU>

Gunn, R.G. (2000). *Central Australian rock area: a second report*, Rock Art Research, 17(2), pp 111-126.

Gunn, R.G. (2003). *Arrernte rock art - interpreting physical permanence in a changing social landscape*, Australian Aboriginal Studies, 1 pp 52-73.

Intergovernmental Panel on Climate Change (IPCC) 2022 Working Group 1 *Regional fact sheet - Australasia*, Sixth Assessment report, World Health Organisation and UN Environmental Program

Henderson, J., Turner, M.K., Dobson, S. (illustrator) (1994). *Arrernte foods: Foods from Central Australia*. IAD Press, Alice Springs.

Henderson, J. and Dobson, V. (1994). *Eastern and Central Arrernte to English dictionary*, Language Centre, IAD Press, Alice Springs, (2nd edition, 2021).

Hill, R., Walsh, F., Davies, J., Sparrow, A., Mooney, M. Central Land Council, Wise, R. and Tengo, M. (2020). *Knowledge co-production for Indigenous adaptation pathways: Transform post-colonial articulation complexes to empower local decision-making*, Global Environment Change 65 102161, <https://doi.org/10.1016/j.gloenvcha.2020.102161>.

Ltyentye Apurte Education Centre (2013). *Monitoring Ltyentye Apurte Springs: Year 8/9, Terms 2, 3 and 4, 2013*, Ltyentye Apurte Education Centre, Tangentyere Landcare, Central Land Council and CSIRO, Alice Springs.

Latz, P. (1995) *Bush fires and bush tucker: Aboriginal plant use in Central Australia*, first edition, IAD Press, Alice Springs.

McDonald, G., River, D. (2013). *Peter Coco Wallace*, documentary in Ngurra series (15 mins), CAAMA Productions, Alice Springs.

Mooney, M., Walsh, F. Hill, R. Davies, J., Sparrow, A. and Central Land Council Ltyentye Apurte Rangers (2014). *Climate change: Learning about what is happening with the weather in central Australia* (A3 35 pp report), CSIRO with Central Land Council, Alice Springs Australia.

Mooney, M., Walsh, F. Hill, R. Davies, J., Sparrow, A. and Central Land Council Ltyentye Apurte Rangers (2014), analysis of unpublished weather data from Santa Teresa (1967 – 2012) Hermannsburg (1889 – 2013) and Alice Springs (1943 - 2013) from Bureau of Meteorology, Australia

Strehlow, T.G.H. (1971). *Songs of Central Australia*, Angus and Robertson, Sydney, Australia.

Wallace, K., and Lovell, J. (2009). *Listen deeply, Let these stories in*, IAD Press, Alice Springs.

Walsh, F., Dobson, V.P., and Douglas, J (2013). 'Anpernirrentye: a framework for enhanced application of Indigenous ecological knowledge in natural resource management', in *Integrating Indigenous Knowledge and Science in Natural Resource Management: Perspectives from Australia* (Ecology and Society issue). 18 (3); 18 p <http://www.ecologyandsociety.org/vol18/iss3/art18/>.

Library & Archives NT. (1947). *Catholic Mission School, Richard Duckworth Collection*, PH0542/0033. <https://hdl.handle.net/10070/720204>

Pye, J. (1989). *Santa Teresa and east Aranda history, 1929-1988*. Darwin: Colemans Printing.

Working together is important to me.

Charles Lechleitner

There needs to be firebreaks between Land Trusts and Pastoral Leases. Think about weather for burning. I have a lot of experience of back burning.

Paul Williams

I love what I am doing around here. I am so thankful for the traditional owners for making me feel at home

Kwementyaye Gorey

We got a season chart, and we all know what time bush foods come. There's no *Alangkwe* (Bush banana), *Yalke* (Bush onion), *Atwakeye* (Bush orange), *Arlateye* (Pencil yam).

Gorey family

I feel for the country because it is suffering. We're losing plants that people could use for food and medicine. We are losing animals like Emu, Kangaroo, Turkey, Hill kangaroo.

Veronica Perrurle Dobson

Sacred sites link us to our great great grandfathers and ancestors. Fenced sacred sites are really important.

Alan Drover and Michael Drover

Track from Snow Bore to Utyetye Spring.



CENTRAL LAND COUNCIL