Ngurrarawarti Wulyu
Martarnupurrru 2012–2022
Keeping Our Country Healthy
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Our Indigenous Protected Area (IPA), the Warlu Jilajaa Jumu IPA, was declared in November 2007 when our Ngurrara Native Title Claim was successfully determined by the High Court of Australia. The IPA covers 1.6 million hectares of our country in the north-west of Western Australia’s Great Sandy Desert.

The Warlu Jilajaa Jumu IPA is named after the fire we use to keep the land healthy (warlu), and the permanent waterholes (jila or ‘living water’) and seasonal soaks (jumu) that are the important sources of water.

When we first got back to our country on trips in 2007 it was difficult for us to find the places our old people talked about when they left the country in the 1960s. With no people on country to look after it, many places were overgrown by trees and grasses. There was no water visible at our traditional water places. We had to dig to find water again.

Since then our Rangers and Traditional Owners have done a lot of work to look after our country. When we go back now, country looks much better: Patches of green native grasses and trees are growing around our jilas and animals are coming back in higher numbers.

We are happy when we come back to our traditional lands to visit places. We have a strong feeling that the land welcomes us when we are back on country.

Our Warlu Jilajaa Jumu IPA is managed in line with the International Union for Conservation of Nature (IUCN) Category V — Protected Landscape/Seascape: Protected Area managed mainly for landscape conservation and recreation. Our Rangers look after country in accordance with our Healthy Country Plan “Ngurrarawarnti Wulyu Martarnupuru 2012–2022.”
Story of the Warlu Jilajaa Jumu IPA

Declared IPA at Lake Pirnini
Ngurrara means home, the place that we “have a feeling for.” There are four major language groups within the Ngurrara people - Walmajarri, Wangkatjungka, Juwaliny, and Mangala. The name of the IPA, Warlu Jilajaa Jumu, comes from the Walmajarri language. There are also many family groups within the Ngurrara people, and each family group is responsible for a particular part of our country.

We lived on our country for a long time and only left in the 1960s. Some of our old people still remember their first contact with white people when they walked out of the desert on the Canning Stock Route. Nowadays we live in the nearby communities of Fitzroy Crossing, Halls Creek, Mulan, Balgo, Bayulu, Port Headland, Jigalong, Punmu and Bidyadanga. Some of us want to go back to live on our country. Others only want to visit our traditional lands and take trips out to our country. Our Rangers have set up a Ranger base at Djugerari, so that it is easier to go out bush, reach places further out in the desert and pass on our traditional knowledge.

In preparation for the Ngurrara Native Title claim, the idea to use a painting as evidence in court was born (please refer to figure 1). Ngurrara artists painted the story of Ngurrara people and their country. Ngurrara people are jila people. These jila places are the defining features that spread across the landscape of the canvas. They are places where events took place in the Ngarrangkarni (Dreaming), where ancestral men who moved around the desert changed themselves into snakes and came to rest in the waterholes. They remain there, keeping watch over the country, keeping places safe for their countrymen and infusing the desert with order.

Country is too far. Every time we walked up a sand dune, the country was still far away. Then we had to turn back, running out of fuel, tucker and water.  

Ned Cox — Ngurrara Traditional Owner describing how difficult it is to get back to country.
Ngurrara country covers approximately 85,000 square kilometres in the Great Sandy Desert of Western Australia, extending from the southern boundary of the Kimberley pastoral stations, south to the Percival Lakes, and longitudinally, almost due south of Dampier Downs in the west to the east of the Canning Stock Route (please refer to map 1). Almost all of our Native Title Claim is classified as exclusive possession over unallocated crown land. It was inhabited by our old people leading a hunting and gathering lifestyle until the mid-1960s. A significant number of our old people still alive today experienced this traditional lifestyle.

Over thousands of years the wind has lifted the red desert sand into long, undulating rows of sharp-crested dunes. Our land is dotted with rocky outcrops, jitapuru (spinifex) and native shrubs. A rich diversity of wildlife roams our country, including the vulnerable jajalpi (Mulgara), nyarlku (Bilby), and the endangered night parrot.

Our lands get little rain. The wet season is short and erratic. For most of the year there is no surface water to drink so our people drink from permanent waterholes called jila, which must be dug out like wells to yield water. When rain does fall, ephemeral lakes and waterholes appear, although the high salt content in the underlying claypans sometimes makes the water too salty to drink.

Our country is not only important to us, but to all Australians. Our freshwater places are important ecosystems and all of our country has high species diversity. Researchers say that our country is a centre for endemism — an area where it is possible to find many unique animal species.

I go visit my father’s country. I was back there four years ago. My father has been telling me to go visit country a long time ago. My father has been telling me about yinirr (tree). When I went there I found the tree my father told me. I like going back to country, going with the Rangers who respect us. I’m very proud of my daughter working with the Rangers.

George Jubadah — Pitangu — Ngurrara Traditional Owner
Map 1: Location of Ngurrara country

Keeping our country healthy

NGURRARAN NGURRARAN

Map 1: Location of Ngurrara country

- Main Townsites
- Roads
- Waterways
- Native Title Claims
- Ngurrara Claim
- Neighbouring Claims
- Warlu Jilajaa Jumu IPA
Vision

It is important to us that we do not harm country, now or in the future. Kartiya (white people) call it sustainability. This means providing future generations with the tools to look after the country and making sure they understand their responsibilities to country. It also means trusting other Traditional Owners will be responsible for their respective countries and will teach their future generations to look after them.

Our Ngurrara law and culture gives us the rules and responsibilities for looking after our people, culture, country, plants and animals. Today we live in two worlds — the traditional world and the western world. To create our IPA Plan of Management, we used the Healthy Country Planning process (Conservation Action Planning — CAP) as a western way of putting all our knowledge together. We also look after our country in the traditional way like our old people did for thousands of years. With this Plan of Management we bring together our traditional knowledge about looking after country with western ways.

Our vision gives us the direction for where we want to go:

**WE WANT TO BE BACK ON COUNTRY:**
We want to be back on country to look after our country and pass on knowledge to our young people.
We want to be back on our country to maintain our cultural relationship to our country and to continue our traditional uses.

**WE WANT TO BE IN CONTROL:**
We want to control access to our country and educate visitors on our country.
We want to be involved in all levels of decisions making and management of our country and IPA.

**WE WANT TO LOOK AFTER OUR COUNTRY:**
We want our young people to look after our country as Rangers.
We want to look after our country in a sustainable way that balances the needs of current and future generations.
We want our Rangers to learn both ways — by traditional knowledge and western scientific knowledge. Future land management should incorporate traditional principles and practices.

We want to act with respect to country, uphold traditional responsibilities and recognise and respect the rights of Traditional Owners.
When we reviewed our old 2007 IPA Management Plan, we looked at all the things that are important to us — we call them targets. In this plan we are focusing on the six most important things. But that does not mean we are forgetting about the many other things talked about in our meetings. When we go out on country with the Rangers, we rarely do just one activity at a time. For example our Rangers might go on country to check on cultural sites along the Canning Stock Route (CSR). At the same time they will collect some bush-tucker plants, check that our jilas are healthy and do some burning if it is the right time of year.

The same applies to things that are very important for other Australians. We have plants and animals on our country that do not live or grow anywhere else. Some of the animals that live on our country are threatened species elsewhere in the world. While we are looking after the six most important targets, we are looking after other threatened or endangered species as well. The Healthy Country Planning process calls this “nested targets.” Appendix 2 shows our list of nested targets for Ngurrara country.

The six most important things we choose to focus on are:

- Ngurrara law and culture
- Jila, Jumu and other freshwater places
- Cultural and heritage places
- Right way fire
- Bush meats / native animals
- Bush tucker / medicine plants

You can find a short story on each of the targets over the next few pages. The stories explain why these targets are so important to Ngurrara people and for our traditional lands.

We need to maintain our language, cultural practices and acknowledge our elders when looking after country

Joseph Nugget — Japarti — Ngurrara Traditional Owner
Ngurrara targets
Target 1: Ngurrara Law and culture

Our whole country is a cultural landscape. Landmarks such as hills, lakes, sand-hills and soak water, all have stories about their creation and history associated with them. The plants and animals all have stories about their creation, kinship and history. Our rules are not written down on paper; we have to learn from the old people and we have to teach our kids and grand-kids. We have to look after our country and our old people and important places in our country to make sure that Ngurrara law and culture stays strong. For that we need to make sure that our language, Walmajarri, is alive and strong. It is important that juju (traditional dance) is practised and maintained. We need to make sure that enough young people go through lore each year. It is important that more young women go out to women’s sites.

We need to be on our traditional lands to practise and remember our rules and to teach our kids. This is what our old people always told us “don’t forget your culture and your country — it makes you strong.” To ensure this happens, each year we need to make sure that we undertake sufficient trips back to country. We also have to keep our culture strong when we are not out bush. Our Rangers must work with government and community schools to introduce more cultural activities into the curriculum. Learning a language starts at home, but it is also important at school. Some of our bush trips need to be during school holidays so families who normally can’t leave town during school terms can come along.

Cultural festivals are important for us and for our young ones. When they perform juju it strengthens them and encourages everybody. Performing at cultural festivals ensures that our dances and songs are practised and passed on to the next generation and that our culture stays alive.

Law and culture is very important because it is knowledge passed on to us, which is essential for survival. It’s been there for a very long time. To survive we have to know about law and culture.
Ronny Jimbidee — Jakarra — Ngurrara Traditional Owner

Respect elders for country. When we go to permanent water, we have to go through the right protocol of respecting permanent water Jila. It is important to pass the knowledge to our young leaders to take over responsibility like our elders.
Terry Murray — Murungkurr — Ngurrara Traditional Owner
Ngurrara targets
Target 1: Ngurrara Law and culture

Dancing at the hand over site
Pimini Lake
When we talk about freshwater places we mean our jilas, permanent waterholes or wells, which must be dug out so water bubbles up; Jumus are our temporary water places. We use them during and following the short and erratic wet season for as long as they hold out. We know about the location of all these waterholes and this knowledge is transferred from one generation to the next (please refer to map 2).

Living in arid desert country, our freshwater places hold high cultural values for us. Our old people’s life on country took place around those freshwater sites. Jila are providing good permanent water and food for us now and for our elders in the old days. The wells from Kukapanyu (Well 39) to Paruku (Lake Gregory) were put down at important places. We have many significant sites on our country, most notably the water places of Kaningarra and Pirliwul along the Canning Stock Route to the east and Tapu to the west. Those jila are significant to us, and the stories are told through song and dance. Ceremony is practised when we visit these sites and other jila. Our old people used the jila as a water supply when they travelled for law, ceremonies and trade. They knew where every jila was located and kept this information like a map in their heads, as there is no surface water for the greater part of the year.

We need to make sure our freshwater places are in good health and the cultural values maintained. This requires us to be on our country, visiting its waterholes once or twice a year so that knowledge can be passed on from our old people to our young and upcoming leaders.

When I started to think about country, I went back with my family. Mum and Dad showed me to dig up jila’s so that the water starts bubbling up. After the water come up we have special grass — Yuka grass. It was my first experience to learn about country. Now as a Ranger, I visited all the other places and I visited Wili, digging it up as my parents taught me.

David Chunguna — Raraj — Ngurrara Traditional Owner.
Ngurrara targets

Map 2: Freshwater places/Canning Stock Route wells
Ngurrara targets
Target 3: Cultural and heritage places

All of Ngurrara country is a cultural landscape and within this wider landscape we have many significant cultural sites. When we say cultural sites we mean important places to us like *jila*, *jumu*, rock formations, artefact places, burial places and rock engravings. Heritage places are from the time Europeans first came through our country to survey the Canning Stock Route. The Canning Stock Route has historical significance for both indigenous and non-indigenous Australians. It was the place where first contact between Indigenous and non-Indigenous people occurred, some of it violent. It was also considered a great surveying feat by Alfred Canning and his crew. Much later, from the end of the Second World War up until the late fifties, a large proportion of us desert people walked along the Stock Route to northern pastoral stations.

Our old people who were born along or near the Canning Stock Route often call it *jilji* country, after the sandhills commonly found there. Among the many things of value to them in this landscape are *jila* — the ‘living waters,’ without which they could not have survived. Our most significant cultural sites are Kaningarra and Pirliwul along the Canning Stock Route and Tapu which is located west of the Canning Stock Route. Additionally there are over 40 heritage sites recorded and registered on our country (please refer to map 3).

There are many sites of cultural significance in the vicinity of the Canning Stock Route. Some are close to the main tourist areas and easily accessible. We want to protect our sites of significance. Tourists have an impact on our country. We want to create awareness amongst our visitors and educate them through signage, booklets and DVDs. While we are keen to educate the public on our connections, interests and history along the Canning Stock Route, we are also aware of the dangers of revealing the location of sites which have not suffered damage.
Ngurrara targets
Map 3: Cultural and heritage places
Ngurrara targets
Target 4: Right way fire

We use fire to keep our country, animals and plants healthy. When fire goes through country in the right season it helps trees to produce bush fruits and bush medicine and grasses sprout green shoots for our native animals to eat. When our old people pass on, we go out on country and light a fire in the desert — it is a healing process for us. One shrub on our country, the Smooth Clerodendrum is called kungkala in our language — the firestick tree. In Walmjarri we use the same word for the fire drill that the old people once used to make fire.

Right way fire means that we need to ask permission from the right Traditional Owner families before we go out and burn country. We need to plan our fire-management programs early in the season. Right way fire means that our Rangers and Traditional Owners do fire management together to make sure our country and important places stay healthy. We try to avoid hot fires late in the year. They can destroy our big trees and some animals cannot escape fast enough when a big fire comes through country. Some of our important trees are very sensitive to fire. We need to look after kumpupaja (Bush Tomato), yupuna (Bush Orange) and kulpunn (Pindan Wattle) so that they are not burned out by fire. It is best to burn our country during yittilal (spring time) just after the first rain. Country is still wet so fires stay small. Jitapuru (spinifex) still burns when it is damp, but it doesn’t make a hot fire. Afterwards country must rest for some years before we burn the same area again.

Much of the country is overgrown or burnt only sporadically, and fire management by our Rangers needs to be improved. Fire regimes have changed significantly since our old people moved away from country between the 1940s and 1960s. Our country is very large and it is difficult to maintain a widespread fire management program. First of all we need to target areas of our country that have not been burned for many years. For right way fire management we must talk to our neighbours as well. The fire history map shows that many late season fires come onto our country from neighbouring properties (please refer to map 4).
Ngurrara targets

Map 4: Fire frequency
Ngurrara targets
Target 5: Bush meats/native animals

When we talk about bush meats in this *millimilli* (plan) we are talking about animals Ngurrara Traditional Owners hunted in the past and animals that have cultural significance for our people. While looking after these animals, we are looking after the threatened and endemic species important to all Australians — we call this process nested targets. In Appendix 2 you can find a list of the threatened and endangered species on our country.

When we go hunting we are looking for *pinkirrijarti* (turkey), *karnanganyja* (emu), *marlu* (red kangaroo), *wirlka* (sand goanna), *lungkura* (blue tongue lizard) and *jarany* (rasptail lizard). Ngurrara people are seasonal hunters. Our young kids already know the right time and place to look for animals to hunt. Bird life on our country is prolific, including many species of birds of prey and passerines. Reptiles are common and diverse. However some mammal species are now bordering on extinction because of feral, carnivorous animals being introduced onto our country.

Traditionally, when our old people looked after the country we made sure food plants and game was abundant. Managing the habitat of important bush meats species includes digging out soaks and *jila*, lighting small and large scale hunting fires and doing ceremonies which increase species’ abundance (please refer to map 5).

Some of our elders who came from the desert to live in river country, have listed many species that have disappeared, especially small to medium mammals. These include *jajalpi* (Mulgara), *mingajurruru* (Golden Bandicoot), *ngaringari* (Western Quoll), *jawanti* (Rufous Hare-wallaby). Mammals that may still be present include *nyarlku* (Bilby), *wilika* (Spinifex Hopping Mouse), *warlukarrpirnjuwal* (Fat-tailed Pseudoantechnus) and the *jampijin* (Brush-tailed Possum).

During *Ngarrangkarni* (Dreaming) *karnanganyja* (emu) had arms. It was a very fast runner, faster than the kangaroo and often chased people. The old eaglehawk felt sorry for the humans because they fed the eaglehawk. He set up a trap and made a boomerang. One hawk sang a corroboree which made *karnanganyja* start dancing. The other hawk went behind the emu and swung the boomerang — chopping off *karnanganyja’s* arms. From that day humans felt happy for the eaglehawk and kept feeding him.
Ngurrara targets

Map 5: Habitats/vegetation classes
Bush tucker and medicine plants are important for Ngurrara people. We use the plants growing on our country for bush tucker, medicine, tools, weapons, shelter, art and crafts. With our traditional knowledge we read our country like a book. We use some of our plants as indicators for our seasonal calendar (please refer to figure 2).

Our country is like a big supermarket. Women have traditionally collected a range of bush foods in each season.

Amongst the most important plants we collect and eat are the fruit of the bush mango, *marnuwuiji* (Konkerberry), *karnti* (yams), *kumpupaja* (bush tomato), *larkanti* (witchetty grub), *karlaka* (bush honey), *jurnta* (bush onion) and *narglka* (desert walnut). *Narglka* must be cooked first as it contains poisonous oils. After cooking it you can make flour out of the fruit; mixed with ochre it is used as a dye or as soap. *Pirlyi* (red ochre) and *mawunti* (white ochre), used in ceremonies, are available in particular areas only known to us.

We still use bush medicine today if we don’t have tablets. For us the bush is like a dispensary. We use *marnuwuiji* (Konkerberry) to smoke babies to repel bad spirits; *marnuwuiji* is a good mosquito repellent as well. *Jitapuru* (spinifex) wax can be used as headache medicine.

Caring for our bush tucker and medicine plants means that we must be careful with hot late season fires that may burn out many of our important plants. It is important for us to record all the traditional knowledge about bush-medicine and bush-tucker from our old people.

To pass on the knowledge to our young ones, we need to go back on country. The bush is the best classroom.

Our Rangers already do weeds work when they go out on country and we need to make sure that feral animals — in particular camels — don’t bring more weeds to our country. We need to talk to visitors as well. With all the cars and tourists along the Canning Stock Route, weeds are spreading faster than in other parts of our country.
Ngurrara targets

Figure 2— Ngurrara seasonal calendar
The table on the opposite page shows how healthy our targets are on Ngurrara country (please refer to table 1). With the CAP process we look at the health for each target in four different ways. We pick key attributes in the context of landscape health, biophysical condition, size and cultural health. Landscape health means we look at the ecological processes around our targets and their connectivity in the landscape with a bigger scale in our mind. We understand biophysical condition as the composition or structure of our targets. The size attribute describes whether there are enough plants or animals; for example, whether there are enough animals to breed. We amended the CAP process to allow us to measure the cultural health of a target. By introducing cultural health we want to show that all natural things have a cultural dimension as well — for example, our knowledge of how to prepare a plant for eating, where and when to find an animal and the stories connected to our sites.

Our rating for the health of each target is based on our knowledge, the knowledge of our partners and some surveys from scientists. So far, only small parts of our country have been properly surveyed. Each year our Rangers find more interesting animal species when they go out on biodiversity surveys. We need to make sure that research is done jointly with scientists to get a better understanding of the health of our targets.

The overall health of Ngurrara country shows up as “good” with most of biophysical indicators being in a “good” condition. “Good” means key parts of our targets are healthy but may need some more work to keep them healthy. “Very good” means that everything is as it should be and not much work is needed to keep the target healthy. “Fair” implies that it is getting worse and a bit of work needs to be done to make it healthy. If we don’t do anything the target will get worse and get a “poor” rating. “Poor” means that key parts of our targets are unhealthy and if no work is done soon they may never be healthy again.

That some of our targets only received a “fair” rating in a landscape context comes from “wrong-way fire” and shows that we need to do more fire management on our country. That the cultural health of some of our targets is classified as only “fair” has much to do with the problems of accessing country and passing on traditional knowledge to the younger generation. This shows us that we have to focus on being out on country, telling the stories and transferring the knowledge onto our newer generations.
### Health of our targets

**Table 1: Health of our targets/viability table**

<table>
<thead>
<tr>
<th>Conservation targets</th>
<th>Landscape context</th>
<th>Culture</th>
<th>Condition</th>
<th>Size</th>
<th>Viability rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current rating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1gewaterara law and culture</td>
<td>-</td>
<td>Fair</td>
<td>-</td>
<td>-</td>
<td>Fair</td>
</tr>
<tr>
<td>2 Jilaa, Jumu and other freshwater places</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Very good</td>
<td>Good</td>
</tr>
<tr>
<td>3 Cultural and heritage places</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>4 Rightway fire</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td>5 Bush meats / native animals</td>
<td>Fair</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>6 Bush medicine / bush tucker plants</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
</tr>
</tbody>
</table>

**Project health rank**

Good
Main threats

Each of our targets has its problems and some of these problems may increase in the future. We call each of these problems a threat. When we were deciding on threats we thought for a long time so that we could find the sources of the problems. Often what we see as a change in country is only a stress. If we spend our time working on the stresses, overall things may not change as the sources of the stress are still the same.

We concentrate most of our work on the main threats on Ngurrara country — the top 10 threats (please refer to table 2). But that doesn’t mean we forget about lower ranking threats. They will only be prioritised once we mitigate some of the bigger threats. Our most important threats on country are:

- Climate Change
- Carnivorous feral animals
- Wrong way fire
- Lack of access to country
- Insufficient resources for land management
- Weeds
- Herbivorous feral animals
- Mining and water extraction
- Lack of cultural programs in mainstream education
- Visitors not being respectful / uncontrolled visitor access

Some of these threats apply to most targets. Some threats apply to only a few targets. The threat ranking in the right-hand column consists of ratings on:

- how difficult it is to make things healthy again,
- how much a threat contributes to one or more targets,
- how severe the threat is and
- whether it is a local or a widespread threat.

You can see from the table the overall ranking of a threat and how much a target is affected by threats. Some threats are linked to others — if a hot fire goes through country late in the year it can burn out much of the native vegetation, allowing weeds to grow up instead of the native plants. On the next few pages we focus on the top 10 threats. We will closely monitor all threats to make sure we pick up on them if they start to become worse.
## Main threats

**Table 2: Main threats**

<table>
<thead>
<tr>
<th>Threats Across Targets</th>
<th>Ngurrara law and culture</th>
<th>Jilaa, Jumu and other freshwater places</th>
<th>Cultural and heritage places</th>
<th>Right way fire</th>
<th>Bushmeats/native animals</th>
<th>Bush medicine and bush tucker plants</th>
<th>Overall Threat Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project-specific threats</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
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<tr>
<td>1 Climate change</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>2 Carnivorous feral animals</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>3 Wrong way fire</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>4 Lack of access to country</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
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<td>5 Insufficient resources for land management</td>
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<td>Low</td>
<td>Medium</td>
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<td>6 Weeds</td>
<td>Medium</td>
<td>Low</td>
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<td>7 Herbivorous feral animals</td>
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<td>-</td>
<td>Medium</td>
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<td>8 Mining/water extraction</td>
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<td>9 Lack of cultural programs in mainstream education</td>
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<td>Medium</td>
<td>Low</td>
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</tr>
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<td>10 Visitors not being respectful/uncontrolled visitor access</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
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<td>11 Lack of consultation with Traditional Owners</td>
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<td>Low</td>
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<td>Medium</td>
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<td>12 Lack of traditional family education</td>
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<td><strong>Threat Status for Targets and Project</strong></td>
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<td>Medium</td>
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*Bushtucker collection at Kuriku*
Main threats
Climate change

When scientists talk about climate change, they mean significant long-term changes in the average weather; these changes can include changes in temperature, rainfall, how the wind blows or how many severe weather events we have to expect. We have teamed up with scientists to monitor, examine, record and analyse changes to country in the past years.

We developed our Ngurrara seasonal calendar to capture traditional knowledge associated with seasonal change and the responses of plants and animals in partnership with other agencies. This calendar will help us to plan for our looking after country work. One of the main aims of the project is to develop an interactive database to monitor weather patterns and assist in evaluating the impacts of climate change to the Great Sandy Desert. The seasonal calendar database is a multi-purpose educational tool which will enhance the capture of cultural knowledge and be used to teach the younger generations. Our Rangers are monitoring seasonal variations as indicators of climate change through a weather station.

Through traditional knowledge we are getting our TO's understanding Climate Change. With the three season in Ngurrara, this knowledge has helped us Rangers and young people with monitoring climate change through modern science and traditional knowledge. It gives us a better vision for planning land management activities on country.

Peter Murray — Waluwai — Ngurrara Traditional Owner

The weather station will help us to find out the right time to burn. It tells us the wind speeds and humidity on our computer. We can look at it in town and don’t have to drive out long way to country only to find out that the weather is not right and we can’t do anything.

Frankie McCarthy — Japalyi — Ngurrara Traditional Owner
Introduced animals are what *kartyia* call feral animals. These are animals which have been introduced to an area where they do not occur naturally and which have become wild. They cause a lot of damage to Ngurrara country. In this chapter we have lumped together both carnivorous and herbivorous feral animals. We know that the animals have different impacts on country and will treat them in our Ranger work separately.

Feral animals on our country include camels, cats, foxes, dogs and cattle in some areas. Feral animals cause a lot of stress on country:

- Camels pollute and muddy waterholes with droppings or when they are dying and trample native vegetation around *jila* sites.
- Camels and cattle can spread weeds or parasites on their hooves, in their fur or with droppings.
- Our cultural art sites can be damaged when camels or cattle rub against them or trample the ground.
- Camels and cattle can trample some of our more sensitive bush-tucker and medicine plants.
- Carnivorous feral animals are believed to have contributed significantly to the loss of native species and our Rangers must work on control methods to clean up country. Our rangers already go spot-lighting and trapping cats, foxes and dogs.

Because of the size and remoteness of Ngurrara country, feral animal control is costly. We must look at ways to make money from some of the feral animals to recover costs. We will be using satellite collars to track the movements of camels on our country; we will also have to shoot female camels to reduce breeding numbers. Around *jila* sites we use tripods so that camels can’t fall in and pollute the water.

Our Rangers work with the neighbouring pastoral properties to check fences so that less cattle escape and roam across Ngurrara country.

*We monitor the camel to see how far they walk. The main impact is on our *jila* sites. They destroy the *jila* site by trampling with their hooves making country bad for old people.*

*Roger Bowmollie — Nilayl — Ngurrara Traditional Owner*

We need to monitor numbers of these feral animals. Look at the impacts on native mammal and bird species and look into control methods and techniques.

*Brendan Fox — Japalyi — Ngurrara Ranger Coordinator*
Main threats
Wrong way fire

When we talk about wrong way fire we mean wildfires that either start accidentally or burn out of control. Wildfires start in different ways: from controlled burns that get out of hand, tourists’ campfires, machinery and lightning. Wildfires are worse at certain times of the year and under certain weather conditions. Parranga (late dry season) is particularly bad when grasses have dried out, strong winds blow and hot weather lets fires burn through the night. Sometimes fires burn for several weeks. These hot fires change our native vegetation so that there is less shelter or food for our native animals. Animals that do not move quickly enough to find a safe place are burned and killed. Wrong way fires do harm on a bigger scale: hot fires release more gasses into the air than colder burns. These gasses have the potential to make climate change worse.

Late dry season fires can be reduced by burning the country just after the first rain and by making fire-breaks and by mosaic burning, so that fires burn smaller parcels of land. It is important that grasses and shrubs do not build up over too many years without fire; providing fuel for severe wildfires. Much of our country is overgrown and burnt only sporadically. Our fire management needs to be intensified. We started doing aerial burning and patch up with ground burning around important sites. When we do fire management we need to talk to our neighbours as well. In the past years some fires escaped onto Ngurrara country from neighbouring properties and burned for a long time.

People need to light fire the right way, minding where the wind is coming from. So it doesn’t blow in the other direction.

Lashalle Thirkall
Once all our old people left their desert country, moving to river country, the only opportunities some of them had to return to their country was with occasional visitors such as anthropologists or scientists, or with mining and exploration companies. Since we started with the Warlu Jilajaa Jumu IPA we have had many trips back on country. This gives Traditional Owners a better chance to visit country. Our country is far away with very few access tracks. When there are tracks, they are not in very good condition and people must travel in convoy in case the vehicles break down or run out of tyres.

Because our younger generation has grown up in towns and communities they haven’t had the same opportunities to learn from their elders as our old people did. Now there are very few people around who grew up in the desert who are still well and active. This makes it urgent to conduct field trips back onto country so that traditional knowledge can be passed on to as many young people as possible.

We are planning to have more on country trips in the dry season. During the wet season it is hard for us to go on country. Even in the dry season you need good vehicles and many spare tyres and equipment. This limits large numbers of people in going back to their country by themselves. Sometimes when we try to access our country, gates on our way are locked because there might be some mustering happening and we have to turn back.

We had a trip with Yirriman and I enjoyed working with the youth. We taught the young ones in trouble about country.

Ned Cox — Ngurrara Traditional Owner

I haven’t been back to country for a long time. I got connection to my father’s country but I grew up in River country. We have to go out to look for the Naji (a permanent waterhole) on my father’s country.

Elsie Dickens — Partarraru — Ngurrara Traditional Owner
Ngurrara country is a big country and most of it is very hard to reach. What hindered us in the past from looking after country according to Ngurrara law, was a lack of resources and the right training.

Our Rangers have to look after country both ways. The traditional way taught to us by our old people and the western way. We feel that our traditional knowledge of looking after country should not be over-ridden by contemporary methods. Rangers need traditional knowledge so they know when to look for animals or where to dig for water. Rangers need western knowledge when they do animal surveys, fire management or when looking at the effects of climate change.

This threat is all about training, resources and money. Our Rangers need to have the time, the right equipment and other resources so they can carry out the work in this plan safely. They need to be trained for their certificates so they can legally do some of the work in this plan. Our Rangers have all undertaken some training and are working towards their certificates in land management. However with new Rangers starting, we must maintain training and resources into the future so that future generations have an opportunity to make a living from looking after country. It is important for us to feel secure when looking into the future. Funding for Healthy Country management must be recurrent so that we know we can continue to fulfil our cultural responsibilities. The right financial planning is important so that sufficient resources will be available when needed.

When I talk to young people they say we all grew up on others people country. When we were older we found out where our country is. Having knowledge for places I was born and raised in has been very important. In the future my vision is to live in our own country and continue to look after it as we were taught. Going back with our own Rangers is very important. Knowing were our parents came from — that gives us our power and strengthen us.

Annette Kogolo — Puruta Wayawu — Ngurrara Traditional Owner
A weed is a plant growing where it is not wanted. Generally weeds are plants that are introduced from other countries or from other parts of Australia. Many of the native plants, animals and other things like fungi, insects and disease do not recognise these foreign plants which allows them to grow and spread quickly, often dominating areas and changing the country. Weeds impact on the health of Ngurrara country.

Weeds spread easily across country. The seeds can be spread through flood waters, rivers, in wind, on graders, in muddy tyres and as prickles on swags. They can travel in the hair and guts of animals like camels and cattle. It is important that we keep talking to our neighbours to find out what weeds are moving in and which ones have the potential to get into Ngurrara country.

So far weeds are only apparent along the Canning Stock Route, in particular Kaniyarrka and Pirliwul. Here buffel grass occurs between the swales. Around tourist places and roads we find more and more bullrush, khaki weed, calotropis, mimosa and snake weed. Around water places we have to be careful and can’t use poison as it affects our freshwater places. We have to hand pull all the weeds and burn them afterwards.

Weeds can damage country in many ways:

- Weeds take over areas where native plants normally grow, pushing out important food and medicine plants;
- Vine weeds grow over trees and shrubs, strangling them and shading out the sun. When they dry out they can create a much hotter fire, which kills bush plants;
- Grass weeds grow much taller and thicker than native plants. They dry out quicker too, resulting in a much hotter fire;
- Some weeds put chemicals in the ground that stop other plants from growing.

We went out to Kurrolku and worked on a couple of weeds. Buffel-grass destroying the water sites and native plants are not growing back. When we pulled them we found native plants to come back.

Roger Bowmollie — Nilayl — Ngurrara Traditional Owner
Like many places in the Kimberley, our land is rich in mineral resources. Mining companies have done extensive exploration on Ngurrara Country looking for oil and minerals. These companies are known as “green field explorers” because they go out in the bush and look for any kind of minerals in the ground, not knowing what is around. Once they have collected enough information on any minerals they can find, green-field explorers ask bigger companies to dig up the minerals. When we look at maps for our country we are concerned that a great many exploration licences have been granted. We must make sure that we are included in any discussions about exploration licences on our country and have a say about where people can go to look for minerals. We need more information on all mining proposals. Our community needs to increase its awareness of these things. Companies must obtain clearance before any work happens. Sometimes companies employ Traditional Owners and Rangers for clearance work. If mining goes ahead it may give us good opportunities.

When mining developments occur we must make sure we have good agreements in place. Agreements that manage the impact on our country and on our people. This includes everything from the design of the mine, its operation, right down to when the mine finishes up.

If a mine is set up on country we need to be careful that it does not affect important sites or threaten our culturally important animal or plant resources. We must look at the effects on our ground water first of all. More bores are sunk into the ground each year and these pose a threat to the groundwater available at all our important freshwater places. As a second stage of our seasonal calendar project we will use data-loggers in bores to monitor the amount of water taken.
When we talked about the health of our targets it became clear that the cultural health of some of our targets is only “fair.” Our cultural health is threatened by different processes — some we can work on, for others we must talk to the right people so that change can occur. This is the case with cultural programs in mainstream education. When the old people left the desert and settled down in river country, all our kids started to go to government schools. In each class there are kids from many different backgrounds but there are very few cultural programs teaching our kids about their culture. This is different in community schools, were the curriculum is more flexible.

We must talk more to government schools to make sure that cultural programs exist in the curriculum. The Australian curriculum allows Indigenous people to influence cultural programs. While it is more flexible now, programs need to be planned well ahead and resourced appropriately. Our Rangers can present on their work and teach the younger ones at school on culture days. With a strong school council we can look at better language programs, not only in school but out on country as well.

Some things we can do ourselves. It is important that we keep doing back-to-country trips in school holidays when families can come along that otherwise are not able to participate. We can support cultural festivals so that everyone comes together and celebrates so that culture stays strong.

Any education program needs to acknowledge the cultural diversity of Aboriginal children and connection to country.

Marmingee Hand — Niyapajaru — Ngurrara Traditional Owner
Threats
Visitors not being respectful/uncontrolled visitor access

Our country sees many visitors every year. A visitor is anyone who is not the right Traditional Owner for country. These can be tourists, government workers, other Indigenous people or mining people. Most of the tourists travel along the Canning Stock Route to enjoy country and learn about Australian heritage. Since our old people left the desert, no one occupies our country full time. Tourists have been accessing sites without the consent of Traditional Owners. Some of those sites shouldn’t be visited at all. On field trips, some of us noticed that some of our cultural sites have graffiti over the rocks and have been damaged. In the old days you had to have a Traditional Owner with you when you wanted to access country.

We are working with our neighbours along the Canning Stock Route and developed a permit system that we run jointly. Through the permit system we give permission to tourists to enter certain places, we know how many tourists travel through our country and it gives us funds to manage these tourists. 700–800 permits are sold each year.

We are responsible for the safety of visitors and bear the consequences of accidents and disturbance of our cultural sites. Visitors should respect the law and culture of Ngurrara Traditional Owners, just as they expect from visitors to their country. Permit applicants receive a code of conduct and information on what to pack to be safe out on country.

It is important to us that visitors know about our culture as well as Australian heritage sites. We need to educate our visitors so that they know about us and know what is right and wrong. We are planning to build information shelters along the Canning Stock Route and to develop DVDs for our website when tourists apply for permits. Along the Canning Stock Route we limit camping sites and taking of firewood — too many trees have been chopped down around some of the camping sites and the country looks barren.

Visitors come and make fire without asking. We need to control visitors so they do things the right way. So visitors know what they are doing.

Sandra Nugget — Kilyiki — Ngurrara Traditional Owner

After the rain
Our vision statement at the beginning of this plan explains where Ngurrara people want to be in the future. In the previous sections we showed our most important targets and the main threats to these targets. To reach our vision we need to keep our targets healthy and fix the biggest threats. Our objectives are bigger topics that help us keep on track with Healthy Country Management. Each objective is supported by several strategies that help us achieve those bigger goals. An objective or strategy either addresses one or more targets or threats. The more targets or threats an objective addresses the better it is. We focus on these objectives and strategies first.

Our objectives for Ngurrara country are:

1. By 2017 (and on-going) Ngurrara Rangers have the operational capacity to manage Ngurrara country through traditional and western knowledge.
2. By 2017 invasive animals will not functionally degrade Ngurrara country.
3. By 2017 invasive plants will not functionally degrade Ngurrara country.
4. By 2018 cultural sites along tourist access roads are protected and managed according to Ngurrara cultural protocols.
5. By 2018 fire on Ngurrara country is directed and managed by Ngurrara TOs who look after natural and cultural values and mitigate late season fire.
6. By 2023 freshwater places on Ngurrara Country are ecologically healthy and their cultural values maintained.
7. By 2023 Ngurrara country is healthy and resilient to the effects of climate change.
8. By 2023 Ngurrara culture is strong and its language is alive through a cultural education program.
### Healthy Country Management Strategies

<table>
<thead>
<tr>
<th>Objectives</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>By 2014 and ongoing: Identify sustainable and recurrent funding streams for looking after country.</td>
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<td>Ongoing: Continue to manage a proportion of Ngurrara Country as an IPA and explore extensions to the IPA.</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
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<tr>
<td>Ongoing: Continue to develop a Ranger Workforce through training of Rangers in Conservation and Land Management.</td>
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<td>Maintain the on-country Ranger Base at Djugerari and explore options for additional on-country bases.</td>
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<tr>
<td>By 2015 develop in partnership with community schools a Junior Ranger Program</td>
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<tr>
<td>By 2014 develop and implement a monitoring and evaluation program to measure effectiveness of strategies</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
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<tr>
<td>By 2015 map an monitor the extent of feral animal populations on Ngurrara Country.</td>
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<tr>
<td>By 2014 explore opportunities through the Carbon Farming Initiative and sequestration methodology to provide sustainable funding for invasive plant and animal management</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
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<td>By 2015 map the current extent of invasive plants on Ngurrara Country</td>
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<tr>
<td>By 2016 effective control measures for invasive plants are in place at all priority sites.</td>
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<tr>
<td>By 2014 develop fire knowledge into fire operation to protect cultural sites, cultural important species, threatened species and ecological communities</td>
<td>✓ ✓</td>
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<tr>
<td>Ongoing: Produce and distribute educational material about the IPA, Ngurrara Rangers and the CSR to educate visitors.</td>
<td>✓</td>
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<tr>
<td>2013 and on-going: Continue existing partnerships through the Kuju Wangka Management Strategy for the CSR and finalise a Kuju Wangka permit system.</td>
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<td>By 2014 and on-going: explore opportunities for Ngurrara tourism enterprises resulting from the Kuju Wangka project and tourism on the CSR</td>
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<tr>
<td>By 2014 develop fire knowledge into fire operation to protect cultural sites, cultural important species, threatened species and ecological communities</td>
<td>✓ ✓</td>
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<tr>
<td>Ongoing: Undertake fire-planning workshops with Ngurrara Traditional Owner representatives for their respective parts of Country.</td>
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<tr>
<td>By 2015 Ngurrara Rangers have the operational capacity to manage all fire operations inc. aerial burning, protection of assets, cultural sites, threatened species and ecological communities.</td>
<td>✓ ✓ ✓ ✓</td>
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<tr>
<td>By 2013 and on-going: Undertake regular back-to-country trips to look after country and transfer traditional knowledge to the next generation</td>
<td>✓ ✓ ✓ ✓</td>
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<tr>
<td>In partnership with scientists continue to undertake biodiversity surveys at priority sites to establish impacts from climate change and other threats on native animals</td>
<td>✓ ✓ ✓</td>
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<tr>
<td>On-going: Record traditional knowledge and current observations gained on field-trips and store appropriately on the Ngurrara database</td>
<td>✓ ✓ ✓</td>
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<tr>
<td>On-going: Produce educational material for younger Traditional Owners such as pamphlets, newsletter, DVD's</td>
<td>✓ ✓ ✓</td>
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<tr>
<td>By 2014 engage with local schools to deliver cultural classes in school and develop in partnership ex-curriculum activities</td>
<td>✓</td>
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**Table 3: Management strategies**
For successful Healthy Country Management it is important to check we are on track with our strategies and actions, our targets are healthy and we achieve our vision.

The IPA Steering Committee and our Ngurrara Rangers must also check if the threats to our targets change over time. For example new invasive plants may come to our country; climate change may occur more significantly. This may mean that some of those threats could grow over time — we call this checking “Monitoring and evaluation.” With the CAP process we decided on indicators to measure the health of our targets and the strengths of the threats. For successful adaptive management we need to revisit these indicators regularly to make sure country stays healthy.

We have set up the Warlu Jilajaa Jumu IPA Steering Committee to give advice on management decisions and to help monitor our progress. Once a year the Steering Committee will meet with other stakeholders of the Warlu Jilajaa Jumu IPA to talk about management of the protected area.

We want to be involved at all levels of decision making and management of the Warlu Jilajaa Jumu IPA and our Ranger group. We want to own and drive the project.

The objectives and strategies set out in our Ngurrara Healthy Country Plan and the advice from IPA Steering Committee will guide our Rangers and Traditional Owners in the day to day management of Ngurrara country.
References/abbreviations


DSEWPAC: *EPBC Act Protected Matters Report 19/12/12*

CAP (Conservation Action Planning)
CSR (Canning Stock Route)
IPA (Indigenous Protected Area)
IUCN (International Union for the Conservation of Nature)
KLC (Kimberley Land Council)
Appendix 1
Walmajarri words

<table>
<thead>
<tr>
<th>Walmajarri</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>jajalpi</td>
<td>Mulgara</td>
</tr>
<tr>
<td>jampijin</td>
<td>Brush tailed Possum</td>
</tr>
<tr>
<td>jarany</td>
<td>Rasp tail lizard / Ridgetail lizard</td>
</tr>
<tr>
<td>jawanti</td>
<td>Rufous Hare Wallaby</td>
</tr>
<tr>
<td>jila</td>
<td>Living Water</td>
</tr>
<tr>
<td>jilji</td>
<td>Sand Hills</td>
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<tr>
<td>jitapuru</td>
<td>Spinifex</td>
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<tr>
<td>juju</td>
<td>Traditional Dance</td>
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<tr>
<td>jumu</td>
<td>Seasonal Soak</td>
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<td>jurnta</td>
<td>Bush Onion</td>
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<td>Dust storms</td>
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<td>kurntupungu</td>
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<td>Emu</td>
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<td>Bush Honey</td>
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<td>gray leaf Acacia</td>
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<td>karnanganyja</td>
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Keeping our country healthy

Building chemical storage shed
## Nested Targets “Bush Meats / Native Animals”

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<thead>
<tr>
<th>Endangered (E)</th>
<th>Vulnerable (V)</th>
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<tbody>
<tr>
<td>Gouldian Finch (Erythura gouldiae)</td>
<td>Princess Parrot (Polytelis alexandreae)</td>
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<tr>
<td>Red Goshawk (Erythrotriorchis radiatus)</td>
<td>Greater Bilby (Macrotis lagotis)</td>
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<tr>
<td>Southern Marsupial Mole (Notoryctes typhlops)</td>
<td>Northern Quoll (Dasyurus hallucatus)</td>
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<tr>
<td>Black-footed Rock Wallaby (Petrogale lateralis)</td>
<td>Freshwater Sawfish (Pristis microdon)</td>
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<tr>
<td>Fork-tailed swift (Apus pacificus)</td>
<td>Great Egret (Ardea alba)</td>
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<tr>
<td>Cattle Egret (Ardea ibis)</td>
<td>White-bellied Sea-Eagle (Haliaeetus leucogaster)</td>
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<td>Oriental Plover Charadrius veredus)</td>
<td>Oriental Pratincole (Glareola maldivarum)</td>
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<tr>
<td>Osprey (Pandion haliaetus)</td>
<td>Freshwater Crocodile (Crocodylus johnstoni)</td>
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</tbody>
</table>

E—Endangered  
V—Vulnerable

Source: EPBC Act Protected Matters Report 19/12/2012
keeping our country healthy