

Recombinant landscapes and biogeographical knowledges

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ABSTRACT

This paper will reflect on how indigenous knowledge is presented in the contemporary ways of talking about landscape and vegetation change. The term 'recombinant' in this context refers to new plant and animal associations which have evolved due to direct, inadvertent, or indirect human moulding and manipulation of landscapes (Meurk, 2010). When indigenous ways of knowing and talking about landscapes is translated into the dominant language of science, policy, or politics, two things happen. First, these are abstracted as 'timeless knowledge' or knowledge from the past, which serves as a minor reference or point of departure for the knowledge produced by the dominant culture. Second, the descriptions of 'indigenous knowledge' in the dominant language obscures the fundamental relations between language and knowledge production about landscapes. There is little interest in knowing how 'indigenous knowledge' about recombinant landscapes shaped by the dominant culture and language is being translated and understood by indigenous groups in their own terms. The paper will focus on the recombinant landscapes of the Kimberley region of northwest Australia which have been produced through enormous biophysical and economic transformation over the past six decades. It will centre on how changes in landscape vegetation, particularly in relation to plants officially categorised as environmental weeds, have been interpreted by indigenous elders of the Miriwoong community and government agencies in the eastern Kimberley. It will highlight the different ways in which these two groups draw together narratives of history and agency to signify the biogeographies of these plants in their landscape.

Introduction

There is a very powerful moment in William Cronon's 1992 article in the *Journal of American History* titled, "A place for stories: Nature, history and narrative", where he describes the different types of narratives about the Dust Bowl. Cronon sets out to show how narratives and their trajectories are often determined by their starting point in time/history. After discussing examples of progressive and declensionist historical narratives of the Dust Bowl, he presents the story of Plenty Coups, a Crow Indian Chief whose tribe, along with others, lived in the Great Plains before the arrival of the white settlers. Plenty Coup describes how they dealt with the settlers, even compromising with them in the hope that they would be able to preserve a part of their homeland, but they couldn't stop the destruction of the bison herds. Plenty Coups ends his story by saying, "when the buffalo went away, the hearts of my

people fell to the ground and they could not lift them up again. After that, nothing happened.” (p. 1366).

Plenty Coups’ statement, ‘after that, nothing happened’, is an extremely powerful moment of disturbance in the narrative from two perspectives. The first, and most obvious, is the implicit violence it conveys of frontier expansion and settlement of the Great Plains. The second, and less obvious, is the tragic silencing of the indigenous voice in narrating history. As Cronon points out, “the notion that Indian histories come to an end is among the classic imperialist myths of the frontier, wherein a “vanishing race ‘melts away’ before the advancing forces of ‘civilization’”. Plenty Coups conveys with great power the tragedy of an older Indian generation but says nothing about the generations of Indians who still live within the shadow of that punctuation mark.” (footnote 36, p. 1366).

The classic imperialist myth is ingrained in the mainstream representations of indigenous knowledge and historical agency. This argument is now familiar to most environmental history scholars and all people participating in the Plant Lives seminar series, so I will not dwell on it at length. What I want to draw attention to, however, is that although many people acknowledge and embrace something called ‘indigenous knowledge’, it assumes peculiarly bounded forms in their understandings.

Some years ago, several colleagues and I collaborated on a comparative research project on how indigenous or ‘native’ communities in places around the Indian Ocean regarded plants that environmental managers categorise as ‘non-native’ or ‘alien invasive’ species. The Indian Ocean is a world shaped by movements of peoples, plants, and animals across overlapping maritime spheres through more than six millennia. As researchers working in Australia, India, Madagascar, and South Africa, we wanted to share insights about how people from indigenous communities in these places described these plants, how they viewed them in relation to other plants in the landscape, and what they did with these plants. Our shared view was that if the concept of ‘native’ had such discriminatory power for biologists and environmental managers to determine what types of vegetation and species should exist in landscapes, then surely the perspectives of native persons regarding these should be paramount in such decision-making.

My former doctoral student Tom Bach and I undertook this research in the Kimberley, the northernmost region of the state of Western Australia. It is a region over 423,000 square kilometres, a little smaller than the size of mainland France (around 543,000 square kilometres) with a coastline extending from the Indian Ocean to the Timor Sea. Archaeological research indicates this is one of the regions of earliest human settlement in Australia some 65,000 years ago. We decided to focus our attention on areas closer to the town of Kununurra within the Ord River

catchment in East Kimberley where the Australian Government had built the country's largest irrigation scheme in the early 1960s.

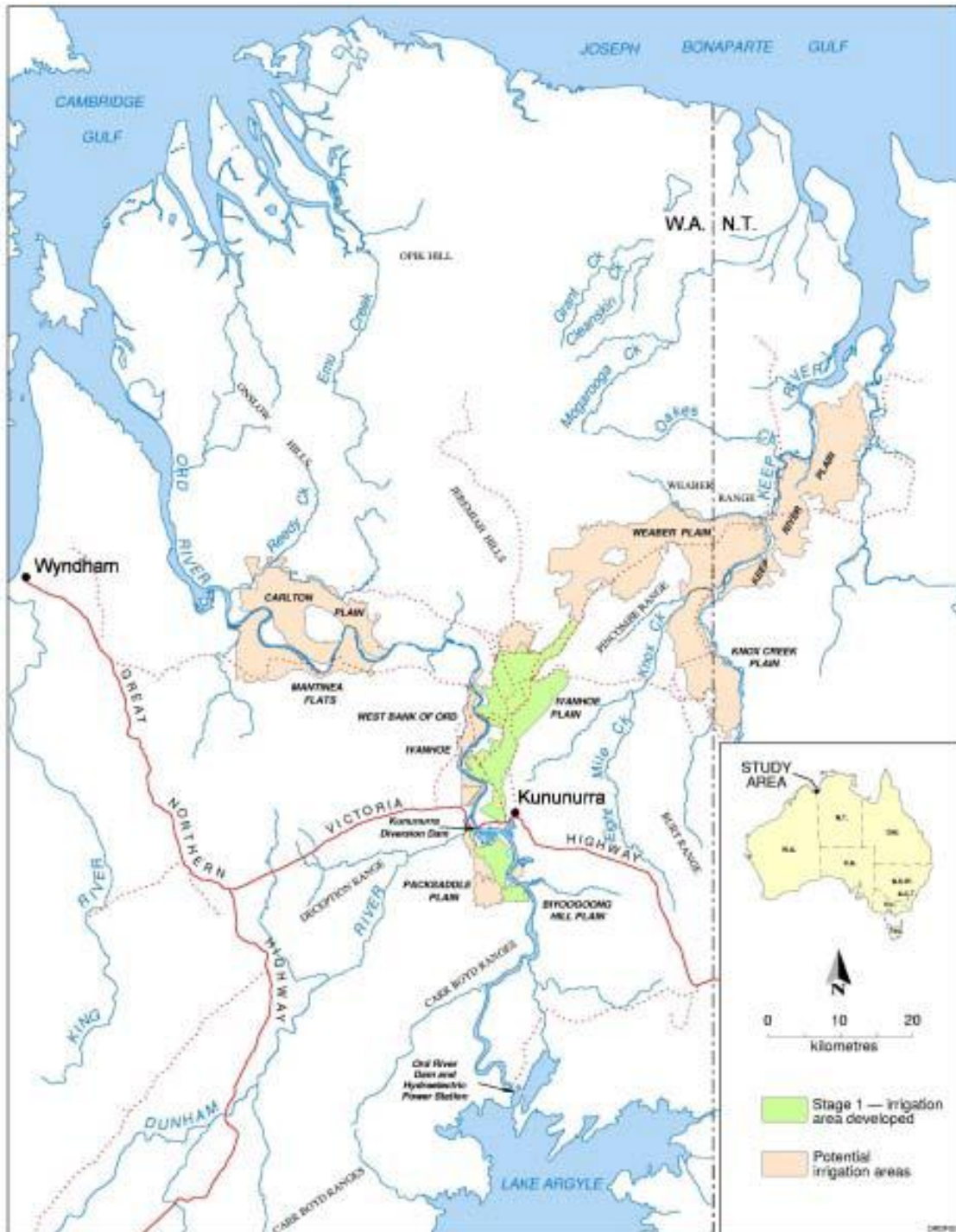





Figure 1: Kununurra and the Ord River Irrigation Area. Source: WA Dept. of Water, 2006

Our very first field visit and meeting with an official from the Department of Parks and Wildlife in Kununurra provided an interesting start. As my student was describing his doctoral research on Aboriginal approaches to weed management in the Kimberley as part of the larger project, the official remarked, "There is no

indigenous knowledge about weeds or weed management. These plants came with white settlers, so we have to provide scientific training to them for doing weed management." We heard a similar statement from the manager of the local Indigenous Ranger Program. His job was to make sure that the rangers were trained to perform a range of invasive species removal techniques, the most important of which was mixing chemicals for spraying weeds.

Method	Application	Chemicals
<p>Cut stump application Cut down tree or shrub as close to the ground as is practical. Immediately (i.e. within a minute) apply chemical to the cut stump with sprayer or paint brush. It is important to coat the entire cut area of the stump. Delay in painting the stump can reduce the success rate of the application.</p>	Plant specific, especially where leaving a dead tree standing is problematic. Basal bark application has same effect but without cutting down the plant	Glyphosate Fluroxypyr Triclopyr Picloram MCPA
<p>Basal bark application Chemical is usually diluted with a carrier such as diesel Apply with a low pressure hand sprayer right around the circumference of the tree from ground level up to approximately calf to knee height. Chemical should be applied just to run off and care must be taken to apply the chemical right around the tree otherwise the tree may not die. Application to about waist height may be needed for some trees such as large leucaena and rain trees that are particularly hard to kill.</p>	Plant specific, particularly useful where native trees are nearby.	Fluroxypyr Triclopyr Picloram
<p>Foliar spray application Chemical is applied to the foliar parts of the plant using either high or low pressure sprayers. Often a surfactant is recommended to use with the herbicide to assist plant take up. Care must be taken to apply the chemical to most or all of the plant to ensure good control. This method can move off target in windy conditions so care must be taken when using this method. Trees can take up to three months to die completely but, depending on the time of year sprayed will usually show first signs of stress within two weeks.</p>	This is a useful method of controlling small plants, usually under a metre as a rule of thumb. The method can be applied to individual plants or those covering significant area.	Glyphosate Fluroxypyr Triclopyr Clopyralid Picloram
<p>Further information about control methods For further information about control methods and options, refer to the following sources of information - Western Australia Department of Agriculture and Food web site http://www.agric.wa.gov.au/PC_93079.html?s=607127337,Topic=PC_93079</p>		
<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Left: cut stump application. Middle: Foliar spraying. Right: Basal bark application. </div>		

Source: Ord Land and Water 2012

We were taken aback by that categorical statement, "there is no indigenous knowledge about weeds in the Kimberley". Undeterred, we went on to the Mirima Dawang Woorlab-gerring (MDWg, in Miriwoong, Mirima place for talking; in English, Mirima Language and Cultural Centre) to see if they would be interested in the topic and willing to collaborate with us on the research. The response was more positive.

The senior linguist and manager of MDWg known by his initials KJ, was employed by the Miriwoong Gajerrong (MG) Corporation (the native title holding entity) to record and train a new generation of language workers to teach Miriwoong language. He was interested in the project. He observed that there was no word in Miriwoong that equated with the English word 'weed', and no Miriwoong names for the numerous weeds that were in the area. He felt that it would be good for MDWg to collaborate with us on the project so that they could develop Miriwoong names for these plants. If Miriwoong is to be a living language, he said, it has to grow its

vocabulary so that people are able to use them to speak about their country, their world experiences, their lives.

This comment, too, stuck in my mind for two reasons. Our immediate response to KJ was that there probably wasn't a word for weed in Miriwoong because its speakers may not necessarily assess plants in the same way as English-speaking farmers, ecologists, and environmental managers do. But the more profound realisation that arose a little later that day was about what KJ had said about keeping language alive. It struck me that if you couldn't speak in your own language about what was changing in the world you inhabited – the physical landscape, the plants, the animals, people, activities – if you didn't have the words in your native language, or the ability to find meaningful words and ways to express these changes in your language, then, in effect, you had pretty much lost your relationship with country. Your knowledge, expressed in your native language, would be silenced. All you could do was to accept the descriptions of your country in the language of the dominating people, or have your knowledge translated and repackaged as 'indigenous', so that they could use it to assert control over your country. You could not speak about the changes in your native language to claim your country into the future.

The Parks and Wildlife official's assertion about the boundedness of indigenous knowledge and KJ's observation about language development proved critical for framing and shaping the trajectory of our research in the East Kimberley. We were guided by the following questions:

- Do the Miriwoong people have any knowledge about so-called environmental weeds?
- How do they describe the changes in the vegetation in their landscape?
- How do they talk about some of the new plants that dominate their landscapes? What names do they give them, what values do they attach to them, what do they do with them?

Methods

Since we were involved in a larger comparative project with collaborators working in South Africa, Madagascar, and India, we were engaged in a broader debate about approach and methodology. In conceptualising the comparative research framework, we were clear that the comparative approach was not going to be some standardised experiment conducted in 4 different 'plots'. Initially, our discussions regarding methods were influenced by the conventional ethnobotanical approach of asking local people in each context to explain their understanding of specific plants, the terms for these in their respective languages, how they categorised them, their uses, how they managed them, and so on. We agreed that we would not use the word 'weed' at all but instead identify areas where the officially designated 'invasive or environmental weed' plants were present and then proceed to ask questions about these species. We recognised that the actual methods of investigating these

questions in our respective field sites would be very different. We wanted to see how far our comparative framework would guide us to the answers we were looking for.

After meetings and discussions with the manager and Miriwoong elders of MDWg about the research, we established a formal agreement to work with the Mirima Language Centre with the approval of the MG Corporation. We decided that rather than focusing on specific officially categorised weed plants in chosen sites, we would pay close attention to how the elders spoke about landscape change in these places in Miriwoong language. We would ask them to describe what each place looked like in the past, what kinds of activities happened in the place, and how they saw changes in vegetation happening in these places. The MDWg language workers would be involved in capturing the nuances of these stories and descriptions. The stories told during the site visits would be recorded in video and audio by KJ and held by MDWg; the language workers would provide us with transcriptions in English. We felt that through these conversations and recollections, we would get to a more contextualised understanding of the 'recombinant' landscapes, *i.e.*, new plant and animal associations which have evolved in these places due to direct, inadvertent, or indirect human moulding and manipulation.

The question that arose from these discussions was which sites we should visit. The Miriwoong elders of MDWg identified certain places of cultural importance that they thought we should see. We went together to particular springs, waterfalls, and billabongs which featured in their cultural Dreaming and at one of these sites the elders formally welcomed us on Miriwoong Country. While we took in the features of these cultural sites and heard how the community visited and maintained them, we also sought to visit other sites in the vicinity of Kununurra with Miriwoong elders and language workers where recombinant features were visibly evident. This was critical for pursuing the agenda that KJ had set for the project: developing Miriwoong words for some of the 'weedy' plants that had come to dominate these recombinant landscapes.

A Very Sketchy history of the Ord River Region

The Ord River, called Goonoonoorang in Miriwoong, is 650 km long, one of five major rivers in the East Kimberley which flow north into the Indian Ocean. Like most rivers in the tropical north of Australia, it has a vast floodplain, but its flow varies considerably during the year. During the dry season, it appears as a rivulet fed by numerous creeks, channels, and springs and is easy to cross, but during the wet season it becomes an enormous sheet of water rising several metres high, flowing with torrential speed across the floodplains to the mouths in the Cambridge Gulf (Fig. 1).

From the 1880s onwards, land speculators from other colonies in southern and southeastern Australia came in with surveyors to assess land for pastoral leases. By the mid-1880s, Goonoonoorang (renamed Ord River, in honour of Sir Harry Ord, then governor of the colony of Western Australia) catchment area was divided up into large pastoral leases held by a few prominent families, the most famous being the Durack brothers, Patrick and Michael. They brought the largest ever herd of cattle overland across from their property in southwest Queensland to stock the pastoral leases of Argyle Downs, Lissadell, Ivanhoe, and Carlton Hill which, together, covered most of the Ord River catchment. News of gold finds in East Kimberley attracted prospectors to the area, and the port of Wyndham, established in 1886, serviced the cattle industry and gold prospectors (Fig. 2).

The expansion of the pastoral economy was facilitated by Western Australian legislation that restricted the movements and activities of Miriwoong and Gajerrong on their country. Laws were instituted to coerce Aboriginal groups to work on stations. Aboriginal families lived in ration camps on the pastoral stations during the dry season, women working at the homestead and men working with cattle. When work stopped during the wet season, Aboriginal families were expected to fend for themselves. During this time, they returned to Country, visiting traditional sites along water courses, pools, and billabongs and harvesting bush foods in and around these sites (Lane 2003).

This pattern of Aboriginal involvement in the cattle stations in the East Kimberley continued into the 1950s until significant changes took place in pastoral practices, legislation for Aboriginal employment (Skyring 2009), and government perspectives regarding the need for development of northern Australia. The arrival of trucks for transporting cattle directly from pastoral stations meant that drovers and stockmen were no longer needed for moving cattle on hoof along stock routes to Wyndham port. By the 1960s, there was widespread mobilisation among Aboriginal workers at pastoral stations for equal wages, and the racially discriminatory clause in the federal pastoral industry wages legislation was removed in 1967. From 1968 onwards, pastoral stations owners were required to pay equal wages for Aboriginal pastoral workers as their white counterparts. Following the end of WWII, the federal government saw the tropical north of Australia as lacking population and economic development and proposed large-scale expansion of irrigated agriculture alongside the 'old' pastoral industry.

During the 1930s, the Ord River region was identified as one of the top five potential food bowls of the world. In 1941, the Western Australian government established an experimental farm on the Ord River following the lobbying of Kimberley Durack who had trialled various crops in areas along the river in his pastoral station. The farm experiments were linked with the parallel exploration of potential sites for irrigation dams. In 1945, the experimental farm was relocated on

the lower reaches of the river as the Kimberley Research Station to expand trials of crops such as rice, cotton, sugarcane, linseed and safflower (Shire of Wyndham-East Kimberley, 2007).

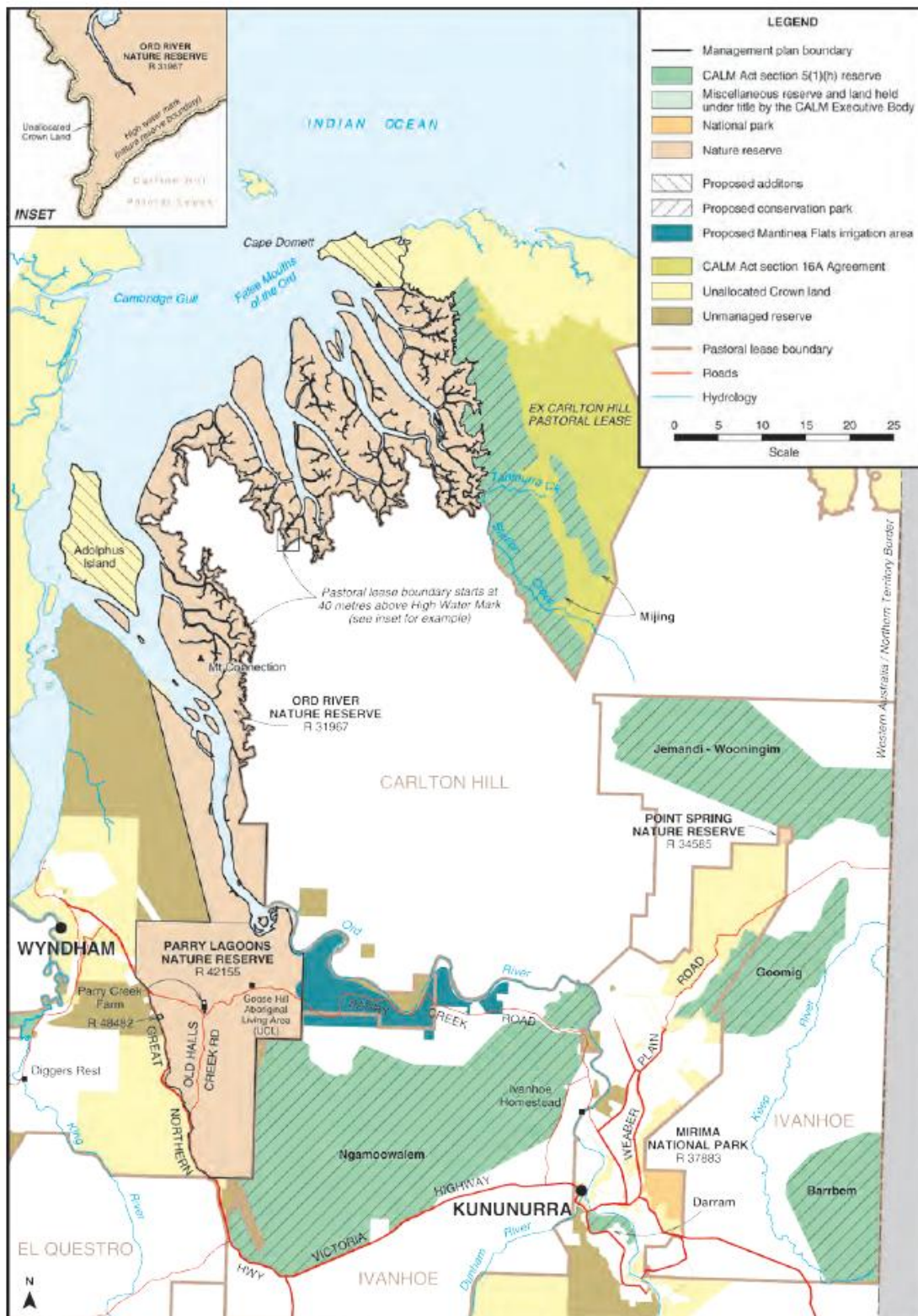


Figure 2: Source: Department of Environment and Conservation, 2012

The experiments at the Kimberley Research Station were successful in persuading the state and federal government to develop the area for commercial agriculture. In 1958, the two governments agreed to fund the first stage of the Ord River Irrigation Scheme as the first motor of development of northern Australia. The site proposed by Mr Kimberley Durack was chosen for building the first diversion dam on the river, and the town established around it was named Kununurra after Goonoonoorang, the Miriwoong name. Construction of the Kununurra dam began in 1961 and was completed in 1963. The larger Argyle Dam upstream was completed in 1971. Together, the two dams were to provide irrigation for three stage expansion of commercial agriculture in the Ord River Irrigation Area.

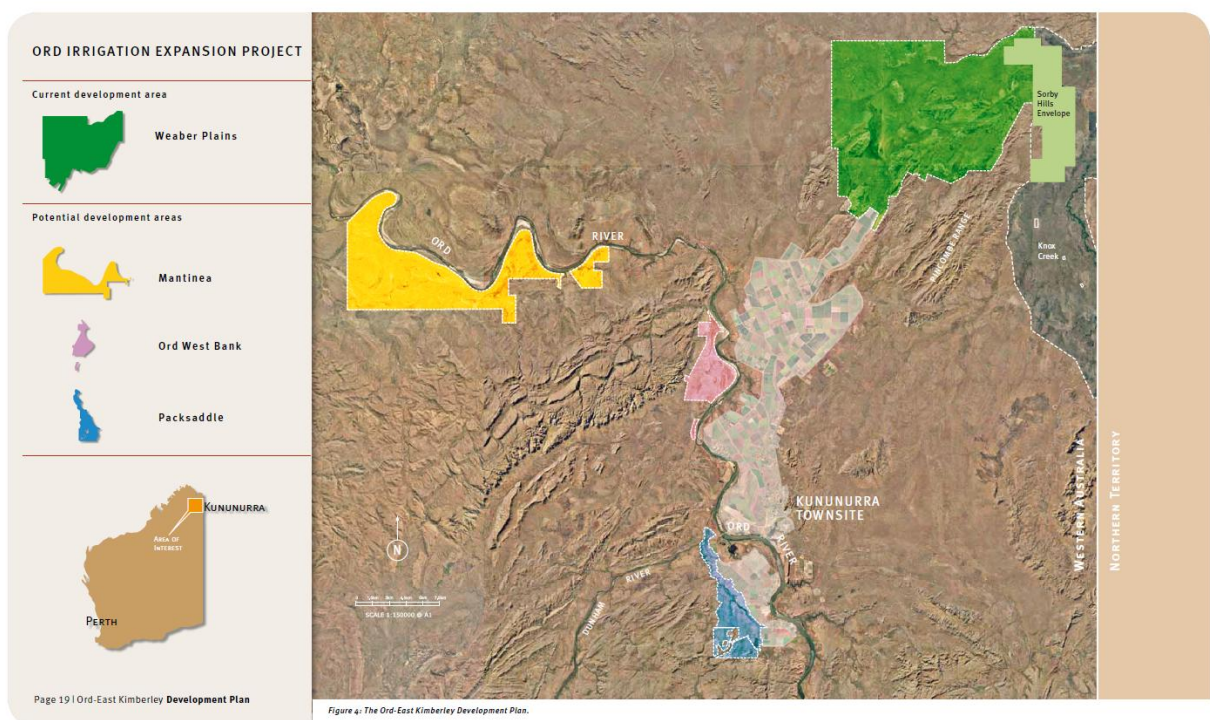


Figure 3 Source: Ord-East Kimberley Development Plan 2011

The shift to trucking cattle directly from stations instead of moving them on hoof to Wyndham port led to a decline in employment of Aboriginal cattlemen and drovers. The use of helicopters for mustering cattle from the 1960s onwards added to the decline. There was a further steep drop in Aboriginal employment in pastoral stations following the passage of the equal wage legislation in the late 1960s. During these decades, many Miriwoong families moved to old camps or 'outstations' which were previously wet season bush camps. Others moved to the areas surrounding Lily Creek Lagoon and moved again when the Kununurra dam and township was built.

The struggle for Aboriginal land rights which began in the 1970s continued into litigation by the Miriwoong-Gajerrong (MG) peoples for Native Title claims over

lands in the East Kimberley during the 1990s. In 2003 and 2006, the Australian courts officially recognised the Native Title rights of MG peoples across large parts of the Ord River region. Prescribed Body Corporates (PBC) were set up to represent the MG peoples as a group and manage their native title rights and interests in these areas.

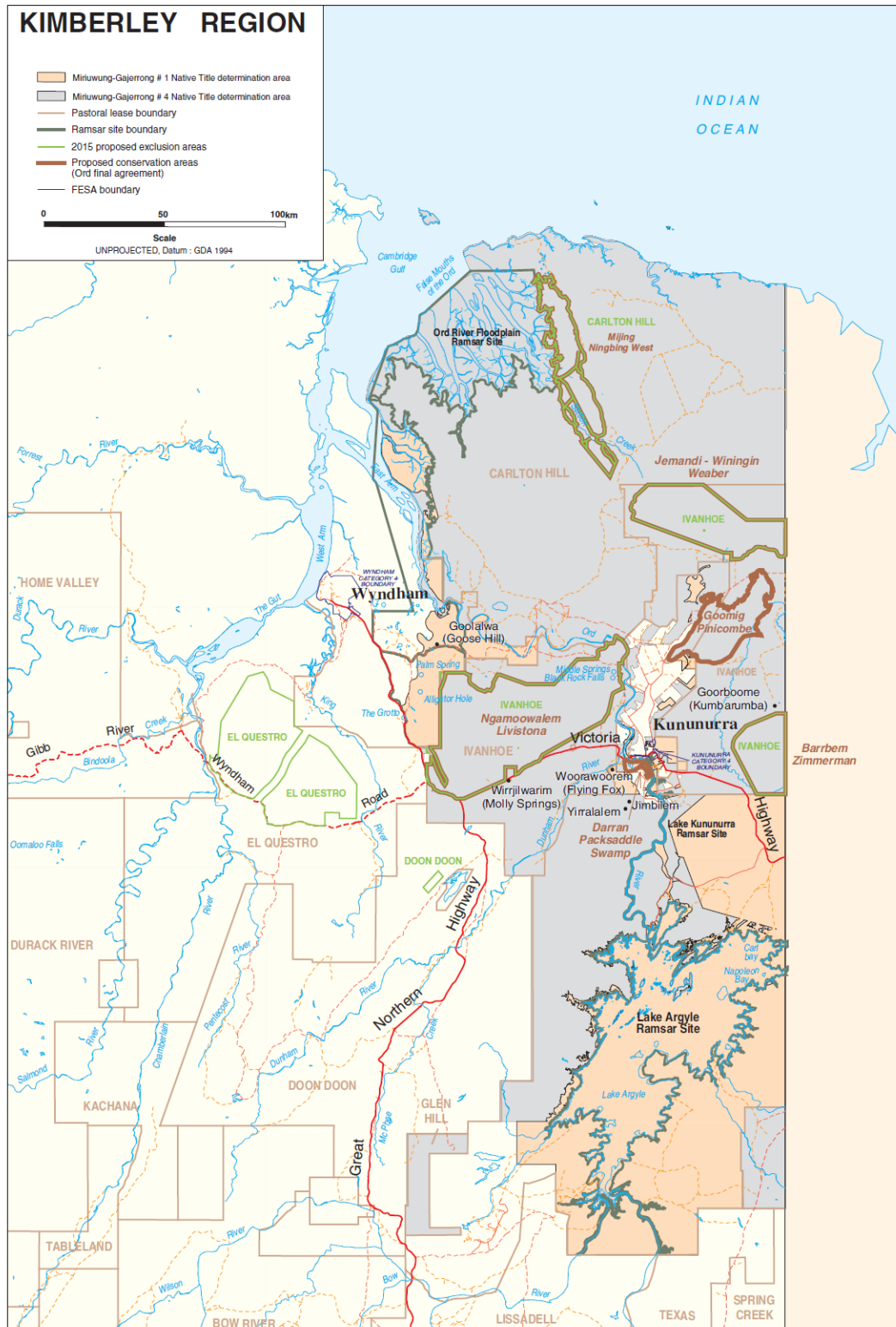


Figure 4. Native Title Determination map. Source: MG Cultural Planning Framework 2008.

In 2006, the MG PBCs signed an Indigenous Land Use Agreement with the Western Australian government known as the Ord Final Agreement (OFA). The OFA covered a broad package of measures including the transfer of freehold titles to the MG Corporation, easement access, establishment of conservation areas, partnerships with government and industry for development of East Kimberley, and management of benefits for the MG peoples. The Ord Enhancement Scheme was established under the OFA to allocate funding to various local organisations for programs enabling social and economic development and securing the cultural heritage of the MG people. The MDWg is one of these organisations ([MG Corporation 2024](#)).



Figure 5: Goonoonoorang country, work in progress by Miriwoong elder [Ben Ward](#) at Warringarri Art Centre, Kununurra; Source: Rangan 2016

Miriwoong knowledge of recombinant landscapes in the East Kimberley

Early on, when the MDWg elders took us to various important sites on Miriwoong Country, they spoke about the different soils and the bush tucker (foods) that could be harvested from them. One elder described them as different types of country:

Jawinkang - blacksoil country – you get *thalawang* (bush yam), *midjang* (cheeky yam)

Jangaljanganl – quicksand country – you get bogged in that country in Wet, best *ngarang* (sugarbag/honey), *goorooroongoong* (nailtail wallaby) on hill side on edge of blacksoil

Wirrijining - sandyground country – you look for *milyoong*, a little goanna (monitor lizard), less than 1 metre long, *barding* (bush potato)

Jiylnng – spring country where hills are and springs come out – *daloong* (green bush plum), *mejerren* (black plum), *mirndang* (pandanus)

Badadang – red country, hard red soil – *ngamoorwarding* (bush banana) here.

As we continued to interact during these trips, the elders noticed our interest in other plants (the officially categorised environmental weeds) growing in these areas and started pointing out the types of country they would grow on. A few trips later, we proposed to the elders that we visit Darram Conservation Park. We had driven past it many times on our site visits and our independent scouting trips around the Ord River Irrigation Area and had seen the signboard indicating it was an Aboriginal Nature Reserve. Darram fascinated us because it was not what you would imagine in conventional terms as a conservation park. It was overgrown and had just about every plant that the WA Department of Environment and Conservation had put on its weeds list. We could not help but marvel at the irony of the name.

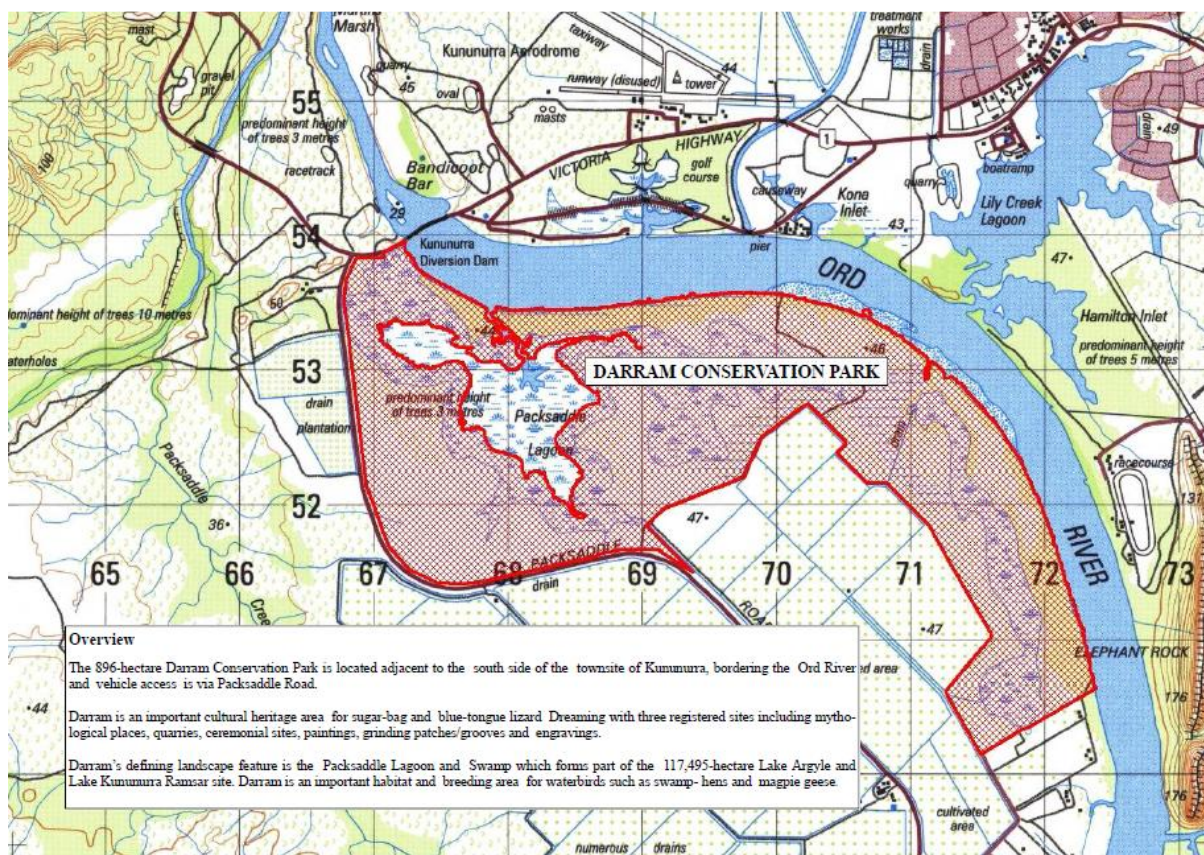


Figure 5. Darram Conservation Park. Source: Ord Land and Water, 2012

The MDWg elders agreed to come with us to Darram Conservation Park. But, when we arrived there, they looked puzzled. They were expecting to go to another place which they called Darram. Their Darram was the area near which the Kununurra Diversion dam had been built. Before then, there had been some large rocks that had formed a kind of natural barrier (called Bandicoot Bar) for the river. During the dry season, the water flowed between and around the rocks, but during the wet season, these rocks held back the river flow to the extent that a 10-kilometre-long lake was created along the river course. The Bandicoot Bar and area around it was the original Darram, a culturally important site for the Miriwoong people that had changed a lot since the building of the dam. The Bar had been blasted and made the base of the Diversion Dam wall. The altered water flow had created a sandy bank which the townspeople used as a beach for swimming in the river. One of the MDWg elders was upset when he looked at the Darram Conservation Park from where we had parked our vehicles. "This is rubbish place", he said, and didn't want to go inside the area. Instead, he wanted us to visit the original Darram site.

When we returned to the MDWg office from the trip to the two Darram places, some of the elders began recollecting stories about the Conservation Park area. Some had worked as stockmen in the pastoral stations, riding horseback and mustering cattle. They would take the cattle during November and December and walk along the river, stopping along the way at waterholes and camping grounds. The Darram Park was a big mustering stockyard, holding yard for branding cattle as they made their way up to the meatworks at Wyndham port.

Some subtle shift took place among the MDWg elders after those reminiscences. They no longer seemed to mind going to Darram Park once they recognised we were genuinely interested in hearing stories of their experiences of working at pastoral stations. As we continued our conversations, we would often travel from the MDWg office to a spot near the entrance to the park where we sat together and listened to their stories of vegetation and landscape change with the pastoral economy and the building of the dam. KJ and the language workers came along and recorded these discussions on audio and video. Sometimes our visits were with the male elders, sometimes only with women elders, and occasionally with both.

In old people's time, they worked on the stations too, Carlton Hill, Argyle, Ivanhoe, Lissadell, Newry, Legune, they worked the whole area. Shorthorn cattle, Durack brought them. We went horseback in the bush. The riverbed was sandy, plants growing on the edge dried up during the dry season and when wet season rains and flooding came they were washed out. Taking cattle to Darraroo (Wyndham), we followed water, many places to stop on sandy banks, for cattle to drink water and rest. The bullock, they eat *moorrlumboo* (*Acacia farnesiana*), old people told kids, watch out, it will poke you. Came with shorthorn. *Moorrloomboo*,

only grows on black soil. You can tell black soil if you see *moorrlumboo*. Lots in Ivanhoe, in all the stations, near the river.



Figure 6: A discussion at MDWg Office; Source: Rangan 2016

In 1960s they brought Santa Gertrudis cattle to Carlton Hill and Ivanhoe. Came from America, kept them at the homestead. Grew couch grass (*Elymus repens*) and buffel grass (*Cenchrus ciliaris*) on black soil. Brahman bullock came later, maybe brought it from Indonesia. Rubber bush (*Calotropis procera*) came with brahman bull. That bush is poison, make cows mad if they eat. Big trees in Lissadell Station, on *jawilkang* country. *Ngetheb!* Makes light like a firebomb when burns.

The truck company started moving cattle in 1960s and 1970s, first was East Kimberley Trucking Company. Some stations, they stopped mustering on horseback, used helicopter for cattle muster. They make big feedlots, brought coffee bush (*Leucaena leucocephala*). KRS [Kimberley Research Station] made trial first, then brought to feedlots, brought by a company called Hooker. Had a big feedlot near Sandy Beach, another near big waterhole called Winyba, also a stockyard, right there [pointing in direction], at the bend of the river. Carlton Hill Station grew 40,000 hectares of leucaena. Leucaena spread everywhere on black soil and red soil country.

How about this neem tree (*Azadirachta indica*), how did it come?, we asked.

They brought it to KRS maybe in 1960s and 1970s. Gave it to people in Kununurra to plant in their gardens, said, good shade tree and poison for mosquito, good for keeping mosquitos away. This plant began to spread a lot along the river afterwards and went to a lot of the places along the river.



Figure 7. Neem spread around Kununurra dam. Source: Rangan 2016

A male elder produced photocopy of an old photograph, showing a group of Miriwoong children posing near the river at Jalinem. He compared the open country near the river when he was a young man with the neem-infested area now. "After '72 [1972], it started changing. We used to run down there, but now not possible because of the neem. The water was shallow then. There used to be gravel right through, not sand. Before the big dam. You can't see the river or go to the river for catching fish, neem is in the way."

A female elder said, "neem started coming, they said it was good for ants, keep them away. Bowerbirds, they like the fruit, take the seed down the river. The seed comes up quick. The old people, they don't know the plant, they passed away before it came. Thought it was poison, would be good to know what that neem used for, come in handy." Another female elder said, "that neem growing everywhere, growing wild everywhere, at Mud Springs, Dingo Springs, Jalinem, in town. Grows in

my garden, make a broom with the branches. Sister-in-law boils leaves and drinks the water, good for her sore throat. Stick part, rub it on your teeth, kill the germs. We need to take the people out and learn them how to use it. Young people, from small, need to learn them.”

Finally, the time came for naming the plants. We agreed with KJ that it would be difficult to give names to all the plants that were named as environmental weeds in the Weed Management Plans. Instead, we would identify those that were most visible in the area around Kununurra and ask the MDWg elders to come up with names. For this important day, we decided to find a spot inside the Darram Conservation Park where we would bring the elders to finalise the names.



Figure 8. Source: Ord Land and Water, 2012

We went beforehand to the Darram Park in feverish anticipation to scope various spots where we would find a cluster of the plants that were going to be named; they were going to witness their naming in Miriwoong.

The following day we arrived with the MDWg elders and language workers at Darram Park at the shady spot we had chosen for the occasion. KJ had prepared us with the rules for naming. Descriptive terms are a very popular method used by the Miriwoong community to develop new terminology, often involving reference to shape, colour, taste, or comparison with known objects. For instance, the word for

'banana' was introduced as *ngamoorwardi-ngoowing*, literally meaning "like a bush banana" and directly referring to a known bush plant which has the shape of a banana.

We made notes using the following headings: Botanical (Latin) name, common name in English, sensory descriptors, similar to (other plants), story about the plant, used for/as, and tentative Miriwoong name.



Figure 9. Naming spot in Darram Conservation Park. Source Rangan 2016

Around a dozen plants selected from the Weed management plan document were given Miriwoong names that day. Some, like *Acacia farnesiana*, already had Miriwoong name, *moorlumboo*, so they were not renamed. But others, like neem, coffee bush, rubber bush, stinking passionfruit, hairy merremia, were. Here are some of them.

Common name (<i>Botanical name</i>)	Approved <i>Miriwoong</i> Name	Literal meaning in English	Short history
Neem (<i>Azadirachta indica</i>)	<i>Goolyawoorng gerrelang gooleng</i>	bitter-leaf tree	Came from Kimberley Research Station in the 1970s
Coffee bush (<i>Leucaena leucocephala</i>)	<i>Gooleng ngoondenging mayenga boolooging-woorr</i>	Good food tree for cattle	Used to feed cattle in feedlots. Been here in the 1970s.
Rubber bush (<i>Calotropis procera</i>)	<i>Mawiya-bang gooleng boolooginga-woorr</i>	Tree that has poison for cattle	Lights up when you burn it (<i>ngetheb</i> - make light like a firebomb) Brahman bull brought it; it wasn't here before
Rain tree (<i>Albizia lebbek</i>)	<i>Gooleng liliwoorr-gang ganjing</i>	Rattle-seed tree	Good for making <i>woomera</i> (wooden spear) when no <i>ngawalem</i> (traditional <i>woomera</i> tree) available
Hairy merremia (<i>Merremia Aegyptia</i>)	<i>Gilengoowing rarrarawoong</i>	Like a bush tomato that spreads	It's this thing that spreads but it looks like a bush tomato, the seed part
Stinking passionfruit (<i>Passiflora foetida</i>)	<i>Geribang ngoojaleng lernjengoowing maye-bang</i> ; short version <i>Gribang</i> is acceptable	Green creeper with yellow fruit	Leaf can be used for sores; boil it and rub it on your sore (scabies type sore)
Caltrop (<i>Tribulus terrestris</i>)	<i>Boog-boog</i>	From Kriol, the thing that pokes	
Moringa (Moringa Olifera)	<i>Gooleng ganjing joorrgooyile-bang</i>	Tree with long seeds	
Mint weed (<i>Hyptis suaveolens</i>)	<i>Gerloongarnang ngooyiweng</i>	Water dweller that smells	Must have been here before my time, long ago; they stick to your socks; smells like a eucalypt



Figure 10. Naming the plants. Source: Rangan 2016

Conclusion

In Cronon's retelling of Chief Plenty Coups' story, the power of his narrative stems from how the history of Crow Indian people is retold in the dominant language. "when the buffalo went away, the hearts of my people fell to the ground and they could not lift them up again. After that, nothing happened" (p. 1366). As far as the dominant language narrative goes, Crow history ended when European settler history arrived, and Plenty Coups' statement is the final acknowledgement of a fate of subjugation and subservience of his tribe. There is no possibility of considering that perhaps Chief Plenty Coups was marking this moment in the story of his people in his own language, that he was saying "*the hearts of my people fell to the ground and they could not lift them up again **for some time**. After that, nothing happened **for some time**.*" It was not the end of the story, but a major moment, a traumatic one. The buffalo had gone, the community felt their world had ended, but they would have lifted their hearts from the ground and dealt with the changes in their lives and their landscapes. They may have observed these changes, produced new knowledge and told new stories to their children and grandchildren in their own language, idioms and ways of life. But none of this would have mattered to the grand historical narratives – progressive or declensionist – in the dominant language. "After that, nothing happened" marks the beginning of History, where the stories of Crow Tribes are forever relegated to the realms of pre-history, nature, and myth.

For the environmental managers and officials of the WA Department of Conservation, the overview page of the weed management plan for Darram (see Fig 5) pretty much sums up what they consider as the indigenous knowledge of the Miriwoong peoples: "Darram is an important cultural heritage area for sugar-bag and blue-tongue lizard Dreaming with three registered sites including mythological places, quarries, ceremonial sites, paintings, grinding patches/grooves and engravings." That's about all. The rest of the document contains pages of descriptions of environmental weeds (all deemed non-native) followed by descriptions of physical and chemical techniques for controlling them. There is nothing to indicate the importance of Darram as a culturally important place for marking the history of experience of Miriwoong peoples with the arrival of cattle, their role in the making of the region's pastoral economy, and their biogeographical knowledge of the recombinant landscapes of the East Kimberley following the building of the Kununurra and Argyle dams.

The names that the MDWg elders gave some of the non-native weeds embodied the aplomb with which they observed the changing landscapes of Miriwoong Country. The cattle, the plants, the people had come from elsewhere; the Miriwoong people had suffered violence, injustice, but they stayed, worked, and fought for their rights over Country. All these changes were part of Miriwoong Country, their culture. They now had the space to tell their stories at the MDWg, to teach the young indigenous rangers in their own language the names and stories of these plants that now live on Miriwoong Country.

Some weeks ago, I wrote to KJ about this paper that I was writing for the Plant Lives seminar, asking what the MDWg elders and language workers thought about the work we did together. He wrote back with their answer.

Yawoorroonga gooleng baj-bajbe berrandawoon ngenayim dawang Miriwoong. Ngoondengin-tha yinginy-ban-tha Miriwoo-biny. "It is good to have Miriwoong words to describe the different plants that are growing on Miriwoong Country."

We say, *ngoondengin-tha*, "that's good", for us, too.

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