8

Wild and Ugly

In 1986 Daly Pulkara and I were travelling from Yarralin to Lingara. The route was familiar to us both, and we stopped partway because I wanted to video some of the most spectacular erosion in the Victoria River District. I asked Daly what he called this Country. He looked at it long and heavily before he said: 'It's the wild. Just the wild.' Daly went on to speak of quiet Country—the Country in which the care of generations of people is evident to those who know how to see it. Quiet Country stands in contrast to the wild: we were looking at a wilderness, man-made and cattle-made. The life of the Country was falling down into the gullies and washing away with the rains.

Wild Country is what Hobbles would have described as 'disorganised' in contrast to Indigenous people's organisation. It includes the erosion gullies, washaways, scald areas, zones of noxious weed invasions and zones of woody weed invasions. It also includes the eco-places of loss: where certain plants used to grow, where billabongs used to hold water and be filled with lilies, where Dreaming trees stood, and native animals used to be found in abundance. In the pastoral country of North Australia, face-to-face encounters with the wild are impossible to avoid. However, it takes the knowledgeable attention of those who belong there to know how devastating are the absences in these wild places.



Figure 8.1. Eroded Country on Humbert River Station that Daly Pulkara described as 'the wild, just the wild', 1981.

Source: Photograph by Darrell Lewis.

I have discussed concepts of change that do not produce 'the wild' (Chapter 5). In this chapter I examine contemporary changes in the land primarily through the perspectives of my Aboriginal teachers. My purpose is to draw out the ramifying effects of damage in order to gain a stronger sense of the losses entailed by double death. The idea that environmental change is somehow separate from social and cultural change is of course erroneous. Few would argue that there are not 'social impacts'. My point goes deeper: these are not impacts of one order on another, nor are they linear, as the term 'impact' seems to imply. There is just one order here; it is the experience of life within a ramifying and increasingly recursive field of devastation.

Irreversible change

The history of the Victoria River District has been extremely brutal, a fact of which Aboriginal people are acutely aware (Rose 1991). In analysing their own history, they identify two major moments in the colonisation process. I have labelled them invasion and settlement. While the one necessarily precedes the other, Yarralin people generally speak of them not as periods

but as processes. Invasion was the process by which Europeans came with cattle and guns, and with the intention to settle. According to Victoria River historians, and here I draw particularly on the work of Hobbles Danaiyarri, the Europeans' strategy was first to kill people and then gain control of the land and the surviving people. Some of the old people with whom I studied spoke with bafflement over the fact that white people thought the lives of cattle to be of greater value than the lives of Indigenous people. Others were bitter that white people had used Aboriginal labour for the really hard jobs in preference to the labour of animals, because they did not want to wear out their animals.

Settler Australians' culture of cattle included the understanding of cattle as a special kind of living property. The word cattle has the same etymological root as capital and as chattel. The term 'goods and chattels' used to be 'goods and cattels'. Long before the invention of money, cattle were one of the first forms of moveable wealth (Rifkin 1992, 28), and for the pastoralists on the frontier of North Australia, cattle were densely significant in terms of property, wealth, livelihood and culture. For settlers, land was a condition for wealth, and a commodity for transactions which might produce wealth, but there is not much evidence to suggest that the settlers actually understood land to be a source of wealth in itself. They set about wasting it extravagantly. Their initial actions were to clear out the Aboriginal people as much as practicable, and to suppress their use and care of the Country.

The Northern Territory newspapers for the 1880s, 1890s and 1900s are full of headlines about Aboriginal people murdering whites. They give the impression of a type of guerrilla warfare in which blacks made unprovoked attacks and whites retaliated. White people's view of Aborigines as primitive (at best) and as obstacles to settlement ensured that they would not recognise the knowledge and the practices of care with which people curated and sustained the Country. Accordingly, people, including their knowledge and practices, were also wasted. Cattle came first. On a Territory-wide basis enough murder took place to supply a string of headlines that generate a sense of the battleground, but on a local basis the story is quite different. Reading the newspaper accounts and comparing them with the local finegrained detail of the police accounts one learns that most of the patrols and most of the killings were in response to disputes or alleged disputes about cattle. Constable William Willshire, the first policeman along the Victoria River, published his experiences in a book, as well as keeping his official journal. He describes the most terrible bloodshed, and most of his accounts of what clearly are massacres begin with a casual remark about going in search of cattle killers or coming across the tracks of some cattle killers. One example will suffice to indicate the link between cattle and killing.

In the month of June, 1894, we came across some tracks of natives that had been recently killing cattle on the Victoria Run. We followed them along ... Next morning we picked up the tracks and crossed the river and in two hours we came upon the cattle killers camped close to the river ... They commenced running and many of them escaped in the tropical growth ... Next morning we went on, picked up another set of tracks ... and came upon a large mob of natives camped amongst rocks. (Willshire 1896, 40–41)

In this account it is never made clear how he knew that the tracks he followed had been made by people who had been killing cattle, and this problem besets him throughout the whole of his appointment—he found tracks and followed them in the expectation that they must be the people he was looking for (see Rose 1991, Chapters 3 and 9). This expedition led him to horrible action. He wrote:

They scattered in all directions, setting fire to the grass on each side of us, throwing occasional spears, and yelling at us. It's no use mincing matters—the Martini-Henry carbines at this critical moment were talking English in the silent majesty of these great eternal rocks. The mountain was swathed in a regal robe of fiery grandeur, and its ominous roar was close upon us. The weird, awful beauty of the scene held us spellbound for a few seconds. (Willshire 1896, 41)

Willshire had tracked the 'killers' from close to the Victoria River Downs (VRD) Centre Camp, across Country and into the edge of the Bilinara sandstone known as Pilimatjaru, where surviving Bilinara people took refuge. He kept coming upon more tracks which he claimed were those of cattle killers and, in the end, he seemed to be killing people who were not necessarily even the same people as the first mob he was tracking. The whole thing rests on an implicit assumption that it is proper to kill people who have been or who might be thought to be planning to interfere with cattle.

As Willshire's account shows, in the early years Aborigines had used fire as one of their weapons in the war of survival. The explorer Augustus Gregory left some of the members of his party at a depot at Mt Sanford, while he proceeded inland on his explorations. As earlier noted, on his return to the depot he learned that Aborigines had tried to burn the camp and the horses by setting fire to the grass (1884, 143).

Subsequently, settlers and police suspected that Aborigines were setting fire for the purpose of burning them and their beasts out. They took a merciless line on fire, suppressing Aboriginal burning wherever and whenever possible. Their efforts were aimed at protecting their stock, fences, homes and lives. Among the losses were the habitats of animals who depended on fire, the mosaic of habitats produced by Aboriginal burning (Chapter 7), the diminution of the distribution of fire-dependent species, the loss of balance between controlled and uncontrolled fires, the opening up of land to woody shrub and other floral invasions, and the loss of much of Aboriginal people's detailed knowledge of the use of fire to sustain the Country.

~ ~ ~

The first settlers saw environmental change almost from the start. With the arrival of heavy, hard-hoofed cattle, the riverbanks were cut up and erosion began. Within a few years the riverbanks began to slip into the rivers, and the soils became compacted. Native grasses and forbs were either eaten out or lost because of soil changes; many of them were the preferential food for cattle, and the stocking and overstocking, along with changes to the soils, meant that these grasses and forbs were quickly reduced. Many of these grasses produced seeds that were staple foods for Aboriginal people.

Reports of erosion continued on a regular basis. Drought years worsened conditions, years of plenty enabled the Country to come back to some degree. Cattle had to have water, so many of their greatest impacts were along the waterways, while on the back blocks away from the rivers, cattle ran wild, along with the wild horses, donkeys, camels and occasional water buffalo (Lewis 2002).

In 1945 the geographer Wilson Maze estimated that 4 to 12 inches of topsoil had been lost in the Ord River area (adjacent to, and subjected to similar pressures as, the Victoria River); he warned that soils and plants subjected to such pressure could not sustain an industry (Maze 1945, 7–19). His voice was ignored. In 1969 a survey showed that 'twenty per cent of the entire Victoria River District was suffering from accelerated soil erosion' (Letts). The survey was announced by Dr Goff Letts, Director of Primary Industry, who was introducing a Soils Conservation and Land Utilisation Act into the NT Legislative Council. A decade or so later, the Conservation Commission of the Northern Territory warned that 'signs of deterioration through fertility loss and erosion is [sic] already evident' (Melville 1981, vi). Ian Melville advocated the use of 'improved' (meaning introduced) pastures as one way of combatting the overgrazing that leads to erosion.

A study of global environmental crises identifies a number of types of land degradation that are prevalent in New South Wales (where the situation is relatively well documented), and are likely to be present, and probably prevalent to greater or lesser degrees, in the Victoria River District: soil erosion (particularly wind and water erosion), soil acidity, soil structural decline, woody shrub infestation, lack of tree regeneration, landslides and salinity (Aplin et al. 1996, 50). Of these, erosion and woody shrub infestation are rapidly increasing in the Victoria River District (Lewis 2002). Water degradation is another major problem: groundwater depletion and pollution are key problems (Aplin et al. 1996, 58). The former premier of the state of Victoria offered a harsh but succinct summary: 'We could not have made a bigger mess of the soil of this country than if its destruction had been carried out under supervision' (quoted in Beale and Fray 1990, 121).

Melville discusses accelerated forms of soil erosion caused by factors that include clearing, ploughing, grazing, off-road vehicles, mining and other forms of human interventions. In the monsoonal tropics, factors which remove the vegetation are particularly significant because the earth becomes so dry during the dry season and is then exceedingly vulnerable to the heavy downpours of the early wet season. In areas where there is heaving stocking, that is around watering points and in holding paddocks, soil is carried away by the wind. The removal of topsoil of course makes regeneration 'difficult or impossible' (Melville 1981, 5). Permanently bare areas are called 'scalds'; they continue to erode by the action of rain and wind. Trees, too, are affected. Grasses and herbs shade and cool the soil surface; with their loss trees find it difficult to cope with soil desiccation and they can die. This is one phenomenon that is termed 'desertification' (Melville 1981, 5).

Wind erosion also destroys vegetation through a sand blasting effect. Some of the big winds of the late dry season carry topsoils and sand; they drive the dust along like a huge red war engine. In contrast, rainfall erosion varies with the intensity of the falling rain. When rain falls on bare soils it smashes soil aggregates and blasts them into the air. The higher rates of rainfall in the tropics have a harsher erosive impact than the more moderate rains of the temperate zones (Melville 1981, 10). Soil particles removed in resulting flows form small channels or rills. Larger rills become gullies. When the water hits the rivers, the soil load enhances riverine forces to produce slumping and undercutting (13). Rivers widen, trees are washed away, banks are undercut and start to collapse, more soils flow into the rivers and the processes continue. Harry Recher, one of Australia's leading ecologists, describes water degradation as the 'great unseen, unspoken and unrecognised threat to our survival' (quoted in Beale and Fray 1990, 48).



Figure 8.2. A scald area in the Victoria River Country, Camfield Station, c. 1990.

Source: Photograph by Darrell Lewis.



Figure 8.3. Trees killed by overgrazing and drought, Wave Hill Station, c. 1988.

Source: Photograph by Darrell Lewis.

For most of the period of pastoralism in North Australia, government action has been directed toward supporting cattle as an industry rather than supporting the resource base on which it depends. North Australian pastoralism is sacrosanct. The relationship between the industry and the state is extremely close, and so-called threats to the industry are taken very seriously; indeed, they are spoken of as if they were akin to treason. Anything that appears to be a critique of the pastoral industry, and of development more generally, is likely to elicit an emotionally charged defensive response.

The economics of the pastoral industry differ from the rhetoric of the Northern Territory Government's promotion of the industry. No one would deny that fortunes have been made in the cattle industry, but not all pastoral properties have rewarded their owners handsomely. Jim Rawling summarises a number of issues:

While important tax concessions are available to rural enterprises in Australia generally, and to private and public companies in particular, the NT historically has had further tax benefits over and above other Australian states. Additional benefits accrue to larger pastoral companies which have preferential access to emerging international project financiers. (1987, 31)

In 1967, for example, Rawling (1987, 20) found that pastoral rentals in the NT netted the Commonwealth \$139,802.00; expenditure on infrastructure for watering and transport came to \$4,119,291.00. Tax concessions, tax loss farming and land speculation were and remain part of the pastoral industry.

International venture capital has had a particularly significant role in the purchase of NT pastoral holdings and can be seen to have strategies which have little to do with national interests, however defined. The outright profitability of pastoral activities within large corporations has not always been necessary as part of their land holding strategies. Interests which are little concerned with the viability of beef production can invest in rural leaseholds for several reasons. (Rawling 1987, 29)

In addition to the contradictory quality of the rhetoric of production when measured against the economics of production in many instances, there are also ecological issues. John Holmes's (1990) study of pastoral properties in the Gulf region shows that the grid of pastoral properties overlies a range of ecosystems, some of which are suitable for intensive pastoral activity, some of which are suited for supporting or intermittent pastoral activity, and some of which are not suited to any sort of pastoral activity at all. A few

stations are unsuitable for pastoralism in their entirety, but most encompass a mix of ecosystems, and for the most part they encompass ecosystems in various stages of decline.

In a rational world these boundaries would be redrawn to enable a more productive conformity between ecology and economy. This is not a rational world, however, and there is still money and political capital to be gained from the cattle industry. Pastoralists had long maintained that the nature of the pastoral lease interfered with their ability to make long-term management decisions. Leases were allocated for long periods of time (100 years) and were subject to numerous covenants: bores to be maintained, weeds to be eradicated, feral animals to be kept under control; continued access for Aboriginal people to the natural waters and native animals of the lease area; stocking levels to be kept above certain minima, and more.¹

In the Victoria River District, there is not much popular support for the public expression of a sense of crisis. Even well-grounded concerns about the future of the industry tend to shy away from the embedded problems of collapsing ecosystems. An expert who preferred to remain anonymous put it to me that the Northern Territory's Conservation Commission could only afford to repair about 1 per cent of the damaged Country, and that there is no way that pastoralists would be able to afford repairs, assuming that they would want to (and of course some do). In 1996 the Commonwealth Government committed \$14 million over a period of six years toward the establishment of the Cooperative Research Centre for the Sustainable Development of Tropical Savannas (CRC-TS). The emphasis was not wholly on the pastoral industry, but pastoralism is the dominant industry in the tropical savannas and accordingly it received a great deal of research attention from scientists across a range of research institutions. At the end of the period of the CRC, the question remains: is pastoralism a viable industry? If so, what conditions would ensure long-term viability?

One of the ironies in the recent history of pastoralism in the Northern Territory is that a number of cattle stations have been purchased for Aboriginal people and have been the subject of claims. In those land claims, the Northern Territory Government opposed the claims (until about 1993) supposedly on the grounds that Aboriginal people would not be able to run the stations properly, and that the Territory's economic future was being

¹ In the manuscript Debbie had a note here: 'fill in on leases, CSIRO recommendations, freehold'—eds.

undermined by Aboriginal people. I call this an irony, because a great deal of evidence suggests that if Country is left to recover, and if people work to manage fire and other ecological 'tools' so as to assist Country to recover, it is possible for Country to 'come back', at least to some extent. If the government was correct, and Aboriginal traditional owners let Country become unproductive from a pastoralist point of view, their actions would probably work toward saving the Country. In addition, one would want to note that many of the stations purchased for Aboriginal people and claimed by them were marginal, and hence affordable. One could argue, in fact, that funds for the purchase of stations for Aboriginal people were bailing out the cattle industry. A further factor is that almost all Aboriginal claimants on cattle stations wanted to run cattle. Their aspirations were not, as the government suggested, to drop out of the pastoral industry, but rather to enter it on their own terms. As yet there have not been studies to show whether Aboriginal methods of running cattle impact differently on ecosystems.

Bang, bang

Daly Pulkara contrasted Aboriginal ways of doing things with white fellow ways, noticing, in particular the issue of waste:

I reckon you [kartiya], you're wasting. Bang, bang, everybody start from anywhere. Make im frightened, yeah. [But us, we] Just walking got a spear, and you can see something [an animal] there quiet, and people can sneak up and just have a look at that thing.²

Daly's words validate not only a method of hunting, but a method of footwalk knowledge that is built up out of, and finds its expression in, attention. He and others hunt with rifles too. The point of his comment is not to claim some sort of purity, but rather to assert the specific values of his way of doing things. Aborigines are often accused of wasting things, and Daly wanted to turn these words and point them in a different direction. His way of doing things is characteristic of his practice and is part of a way of knowledge that he has inherited from his forebears and has added to in the course of his own life. It is a way of knowledge that is attentive to the world.

² Daly Pulkara, tape 80, recorded at Lingara, 15 July 1986.

Daly spoke to a white perception that Aborigines waste things, and he wanted to turn those words around and make a case that white people waste things by being indiscriminate and unobservant. Anzac Munnganyi, from Pigeon Hole, said: 'White people just came up blind, bumping into everything. And put the flag, put the flag.' His imagery of white people stumbling around in unknown country and yet having the arrogance to 'put the flag' and claim the land strikes me as immensely insightful. For settlers and for many Aboriginal pastoralists, pastoralism is a form of production. In the remainder of this chapter, I examine its underside as a form of destruction.

I have already told about going for yams and lilies, and ending up at the river fishing when the yams weren't there, or the billabong was bare. Individual episodes were usually treated as aberrations, and my teachers held to the view that if we went to the right place at the right time with the right people we would find what we had been looking for. Our 'bad luck', it seemed, was simply that.

Once I began making a concerted effort to document plants I asked more persistently, and some of my teachers became determined to find a particular plant and show it to me. We became far more methodical in our efforts, both in discussing where, when and how we would find a particular plant, and then setting out to do so. Once such plant is the toxic tuber kayalarin, which is emblematic of Jessie Wirrpa's home Country. I learned a lot about the tucker: what it would look like if we could see it, how we would gather it, and how we would process it. I think that it may have been Crinum augustifolium, as Ian Crawford (1982, 40-41) describes a toxic tuber in the Kimberley that grows in a similar habitat and is processed in the same way, and with a similar appearance to kayalarin. We were never able to find a single specimen. It used to grow in such profusion that it became an identifier both of home (for the people) and of the people themselves (to others). One of the ancestors was named for it—Old Kayalarin; the area where it grew in profusion is also called by its name—Kayalarin Country. We drove and walked all over the area where it used to be, and there was no kayalarin. We fenced off a small exclosure in the area where it always used to grow and checked it over several years to see if anything grew back when the cattle and horses were kept out. Jessie experienced our defeat quite personally, becoming increasingly depressed every time we talked about kayalarin. After a few years we did not talk about it anymore.



Figure 8.4. Kayalarin (Crinum augustifolium), a species once prolific on VRD, but now extremely rare.

Source: Photograph by Darrell Lewis.

The research prompted people to think about patterns of loss, rather than holding each event to be an aberration in a pattern of plenty. This was difficult, not only because it was disheartening, but also because it contradicted much that people hold dear about their relationships to Country and the ancestors. In Dingo Makes Us Human I explain in greater detail that a basic moral principle of Yarralin people's relationships to Country, and for them, a moral principle that is foundational to how the world works, is that a Country and its people take care of their own (Rose 1992, 107). People's responsibilities to place are reciprocated in the responsibilities that Country has to nurture its people. Our attempts to document the foods that nurture ended up in many instances documenting patterned and continuing loss. I discussed with Jessie the idea that if we could get a kayalarin plant she might to try to re-establish them. She said no; let them grow them in Darwin where people can take care of them, she said. They're gone here. Those plants were an identifier of her group and home. Other people's kayalarin were, apparently, no substitute, and nor did she want to subject plants to further decimation.

These are deep and serious issues about the quality of change and the continuity of life in the world. I will return to them, but first I want to document more of the loss. As the research proceeded, people began to tally up some of the areas and kinds of damage, and to try out explanations. Doug Campbell mused about loss. He spoke particularly of areas close to the station where people's sedentarised condition almost certainly led to overuse. As he points out, however, cattle were competitors for Aboriginal people's food, and they destroyed large areas.

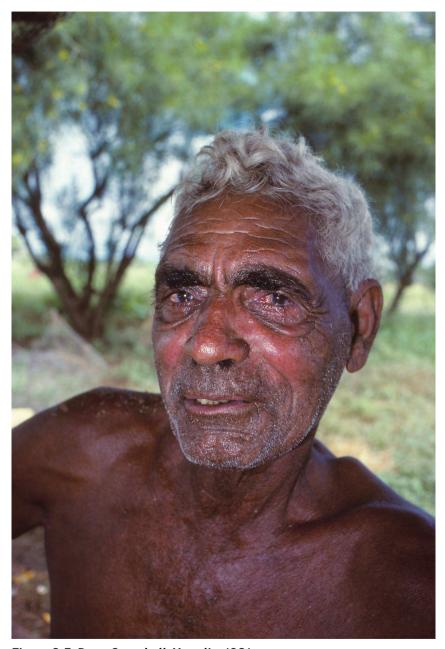
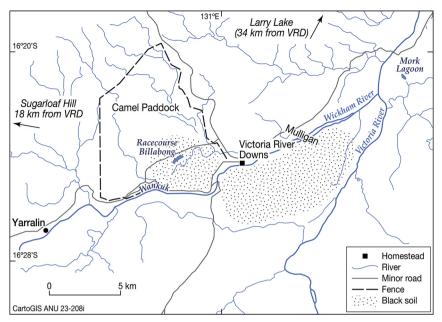


Figure 8.5. Doug Campbell, Yarralin, 1981.

Source: Photograph by Darrell Lewis.



Map 8.1. The foraging range of Doug Campbell and other Aboriginal people who once lived in the 'compound' at VRD homestead.

Source: Karina Pelling of CartoGIS ANU.

It's not like before, everything used to grow every way. Camel paddock, too. And Racecourse billabong, coming out to the airstrip and going back to Wangkuk: there used to be two yams: *kamara* [*Ipomoea aquatica*] and *wayita*. I don't know where that tucker, might be too much cattle. New bore there, *wayita* was growing there, too, long time ago.

Might be some on that hill, there, Japarta [Mululu Bob] reckons wayita growing there. And wanimirra too. Rubber bush and bindii [introduced weeds, Calotropis procura and Tribulus terrestris] killing these yams too, because wayita used to be all around Sugarloaf [hill, near Yarralin].

At that black soil over at Little Mulligan, we no more see that [yams].

And kitpan [Cucumis, probably melo], should be on the black soil, all around, that's gone too. [From] Larry Lake and all around [black soil Country]. The cattle really like that, it's a little cucumber. Before, you'd walk all over them, and now you can't find them. All the tucker still coming [up] in Jasper Gorge—*kakawuli*, and *mamunya* [probably *Dioscorea bulbifera*]. And at Slatey too, not much cattle there.

At Mutpurani, Mother used to get it there—it used to be the biggest garden.

Even bamboo spear, that river was full, right up to Layit junction. Nothing there now. You can just see rubber bush and all the rubbish grass.

No *kamara* at Larry lake and Mork billabong. And *karil* [another *Cucumis* sp.], we used to get plenty, and leave some there for next time.³

Dora also spoke of some of the plants that used to grow around Racecourse and Mulligan billabongs.

And nother one tucker *kamara* [yam]. *Kamara* like a parsley, eh? Big one, like that. Get im like that, that *kamara*. *Wayita* all right. You know *wayita*, little one.

Debbie: Was that *kamara* growing close up to VRD?

Dora: Yeah. Im bin growing there before, longa VRD longa that old racecourse, this side, eh. Man call im *Kankiji* [billabong]. There now lotta *kamara* bin get up there before. When I was big one now. We bin havem big mob there.

And *janaka*. *Janaka* bin longa that bull paddock there longa that Mulligan. We bin getembad all the time there. No more this time now. This time nothing. I don't see im this time. *Janaka* I no more see im now, this time. Might be that bullock eat im, you know, finish im up. Because he likem eatem im, you know.

Doug Campbell considered the idea that with the loss of prevalence there was also a loss of the knowledge of getting and cooking the food. *Janaka* is lightly singed in the flame of the fire and peeled open. The pith is the edible part:

³ Doug Campbell, notebook 38, 7-10.

⁴ Dora Jilpngarri, tape 82, recorded at Yarralin, 18 July 1986.

And *janaka* he's growing in the black soil. Oh, grow about that big, and early days people bin always get them. All them old girls bin always get them, and just get them out, and burn im on the light [fire], you know like that, just burn a big mob like that. Just work im up like that. And just getem out and just split im like that and break im like that and you get that part of it, inside one. Oh, bloody good tucker too!

Every way im bin grow here. But I can't see im growing now. Oh, im grow, but they don't get im now. I don't know why. Janaka he's grow any way long black soil, up here. Oh, after the wet he'll come down. You have a look around and I'll find one. He's still growing but they don't know how to use them now. Them olden time girls they know pretty well all that, only when we was born, oh, them young girls bin always chasing all that. Put im in the coolamon and bring im back longa that station, and cook im ... and they break im like that, you know. Well you see that stuff coming out. Holy Christ, he's good one. Mmm. They bin always put im la coolamon, getem all that one everywhere, just use im, or you want to squash im up, you can eat im ... like a damper or johnny cake. Sweet one too.5

Dora and Doug were born about 1912 and 1913. They remembered a time where there was so much *janaka* that people brought home coolamons full of it. Old Jimmy (born about 1905) also remembered a time when *janaka* was a staple:

I bin live longa that tucker *janaka* too. Limbunya Country, yes, when I bin little boy. I bin always cook im. *Janaka*. Im bin always ... broke im, pullem, get that inside tucker, make im like a johnny cake.⁶

It took several years to find *janaka* (also called *janak*, *Abelmoschus ficulneus*). In a year of good rains we found it mixed amongst the sesbania pea (*Sesbania cannabina*), which is an increaser species on black soil pasture after very heavy stocking (Petheram and Kok 1983, 211). Once it had been a staple

⁵ Doug Campbell, tape 86, recorded at Yarralin, 24 July 1986.

⁶ Old Jimmy Manngayarri, tape 110, recorded at Yarralin, 13–14 August 1991.

for humans; it had been nearly eaten out by cattle, and now was surviving in amongst the weeds that take over after the cattle have eaten everything else. People born more recently remember *janaka*, but not as a staple. It seems to have been lost as a staple in the first few decades of the twentieth century.

One other plant that people spoke of with deep regret is called *kanjalu*. It once grew along the edges of springs and other sites of fresh water, and is a bulb, probably similar to a water chestnut. A site for *kanjalu* is in Old Jimmy's Country, at Kunja Rockhole on Kunja Creek:

Kanjulu only longa Kunja rockhole ... That's the only place. He all gone now. You know im might bin dry and finished.

Debbie: We can't find that one any place.

Jimmy: Yes, they want to find im that one *kanjalu* now. Good tucker. Good size, like this. And you cook im, cook im in the fire, oh, beautiful to eat. Oh, good.⁷



Figure 8.6. Kunja Rockhole on Limbunya Station, a Dreaming place for the water plant *kanjalu*, now believed extinct throughout the district.

Source: Photograph by Darrell Lewis.

⁷ Old Jimmy Manngayarri, tape 111, recorded at Daguragu, 14 August 1991.

Another plant that grew near sources of fresh water is yarkalayin. I have not been able to identify this plant either.8 Daly explained that it used to grow back up in the rough Country around the springs and creeks of the watersheds. He thinks it may still be there, but it is no longer in any accessible area. He compared the loss of yarkalayin with the loss of jarrwana—both were formerly prevalent and now are difficult, or impossible, to find: 'Yarkalayin back to Broadarrow Creek now. Some of them, I think. Oh, properly bullocky bin eat them. Jarrwana same. Jarrwana always been everywhere. Everywhere. Right up Timber Creek.'9

People spoke of former areas of abundance as 'farms' or 'gardens'. They were not proposing an analogy with cultivation, per se, but rather an analogy with knowledge and abundance. The garden is a site of abundance, and it is also a known site. Similarly for these hunter-gatherer peoples, the world was not randomly filled with food, but rather food was localised and predictable for those who knew where to go, when to go, what to look for, how to harvest it and how to prepare it for consumption or storage.

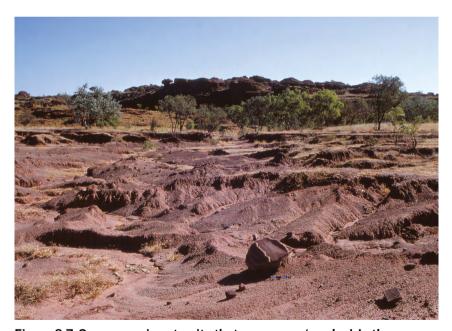


Figure 8.7. Severe erosion at a site that was once a 'garden'. In the foreground is a seed-grinding millstone. Gordon Creek, VRD, 1984. Source: Photograph by Darrell Lewis.

Smith et al. (1993) have identified this plant as Aponogeton vanbruggeni—eds.

Daly Pulkara, tape 80, recorded at Lingara, 15 July 1986.

As Doug Campbell said, people would leave some there for next time; food getting was not a matter of harvesting it all, but rather of taking a portion and leaving a portion. Jessie Wirrpa contrasted this human behaviour with the behaviour of cattle. In commenting on the huge reduction in the amount of 'bush bananas' (*Leichhardtia australis*), she said that cattle eat the whole vine, and eat the fruit before the seeds ripen and fall, so the plant has no way to reproduce itself.

We were able to document many more plants than people actively use these days, and one of the reasons for the lack of use is that plants that are still living in the area are greatly reduced in numbers and are growing sparsely. They live in out of the way refuge areas rather than in their own proper habitats. This is especially true of plants whose preferred habitat is where cattle graze, and of course, of plants that are grazed by cattle, horses, donkeys and other introduced herbivores. The best sites for collecting specimens were around the bases and up into the crevices of sandstone ridges. In these areas the cattle rarely ventured, and many plants whose proper habitat is not a sandstone crevice were nevertheless hanging on to life in these places. In terms of the continuing presence of living plants, the existence of refuge areas preserves diversity for the future, but in terms of making effective use of the many foods, medicines, tobaccos and technological items which are now out of place ecologically and reduced to the point of extreme scarcity, the situation is not workable.

Daly Pulkara thought about where things were growing, and how they were surviving. Shortly after our conversation about 'the wild' he had the opportunity to fly into Country he had not visited for decades. He developed a set of contrasts which constituted a continuum ranging between quiet Country on one hand, and various stages of degrading Country on the other hand:

I went up there with a plane and find that Country [inaccessible 'quiet' Country which was being documented under the Aboriginal Areas Protection Legislation]. Oh really lovely, good place. Just like the time when we bin there [footwalk]. My Country look nice and good yet. You know, my father walking there before, well he [Country] was looking same yet. Not scrubby or more waste. Here [at Lingara] we got a little bit, you know, we not look ugly here, but ... You go back to Yarralin, you'll see all kind of thing. Rubber bush [an introduced weed] never grow

up to this Country yet. That coming from different place. [At Yarralin] More scrub. More waste. You looking back to Lingara, here, you look everything true every way. Same tree, anyway. Yeah, yeah, I bin properly glad to see that.¹⁰

His qualification 'same tree, anyway' in reference to Lingara is his acknowledgement of a specific loss at Lingara. The trees are there, but the grass is gone. Lingara is an outstation that was established on Humbert River Station after the pastoral strikes. The Humbert River mob (Daly, Snowy, Riley, Nina Humbert and others) had walked off the job in 1972, and when they returned, they came to Yarralin on VRD Station (Rose 1991, 233). They had never stopped thinking about a community of their own in their own traditional Country on Humbert River, and in 1980 they established an outstation at the site of a Dreaming tree that is an increase site for the seedbearing grass known as *ngaruyu*, *mangorlu* or *lingara* (probably *Fimbristylis oxystachya*). A Dreaming tree identifies the area of the Grass Seed Dreaming.

The seed-bearing plants are so rare that they are almost gone. Grass seeds were, of course, both a staple and a strong identifier of women's work, mother's care and Country's bounty. It was still an obtainable food in the 1940s, and Doug spoke of bags of seeds being sent back to VRD. I asked Kitty Lariyari about *mangorlu* (*ngaruyu*): '*Mangorlu* too. Oh, this time nothing now, this one *lingara*. This time nothing now. No more like before. Oh, too much [plenty] im bin there.'¹¹

The site that should promote abundance no longer does so, and the meaning of the place has become a memory for the older people, and a story out of the past to younger people. The time of grass seeds once was a time that unfolded into the world from season to season following the rains. There is a little seed-eating bird whose song tells the rain to go away and heralds the arrival of dry weather and ripening seeds. Time, in this context, has stopped flowing, and the ripening seed event that is linked with the bird's song to send away the rain no longer occurs. Loss of a significant species (whether that loss is an outright extinction or the loss of adequate abundance) is a loss of time, continuity and communication.

¹⁰ Daly Pulkara, tape 80, recorded at Lingara, 15 July 1986.

¹¹ Kitty Lariyari, tape 85, recorded at Yarralin 24 July 1986.

Faunal loss

Reptiles seem not to have been so badly affected by the intrusions of European domesticated animals, although skinks and other reptiles are preyed upon by feral cats (Low et al. 1988, 16). Doug Campbell remarked upon the decreasing numbers of goannas when I asked him if he had never been hungry in his life: 'Never for nothing in my life. But this time you can't see em anything goanna walking around. You can't see em anything grow, nothing. You can't. Can't find nothing.'¹²

With mammals the story of loss is extreme. As stated, scientists estimate that up to 60 per cent of the animal species in the arid and semi-arid cattle country may be locally extinct. I cannot speak with that kind of certainty for this area, but there is no reason to suppose that it is any better than elsewhere. There are four main losses that my teachers discussed with me: bandicoot (puluka; Isodon auratus), bilby (jarkulaji; Macrotis lagotis), brushtail possum (jangana; Trichosurus arnhemensis) and 'native cat' (parjita; quoll, Dasyurus hallucatus). Several of the oldest people had seen all of them in their lives, but no one had seen any of these animals for decades. A study commissioned by the Conservation Commission of the Northern Territory claimed to have identified signs of bilby in the Bilinara sandstone (Low et al. 1988, 14). It thus seems possible that the animal still survives in the region, but Aboriginal people have not seen it for years.

I found it impossible to make strong identifications of mice, rats and other small marsupials. It seems that a number of them may have been classed together under one term, but in the absence of specific individuals, and in the absence of recent and detailed knowledge, it was not possible to determine which animals were still in the region and which were no longer there. The small delicate mouse (*Pseudomys delicatulus*) and the pebble mound mouse (*Pseudomys johnsoni*) are still to be found. Others undoubtedly were there, and some may still be there, but I have not been able to make identifications. The Low ecological survey found evidence for nine native mammals on VRD Station: agile wallaby, northern nail-tail wallaby, greater bilby, red kangaroo, common wallaroo, antilopine kangaroo, little red flying fox, hoary bat and the common planigale (a carnivorous marsupial mouse).

¹² Doug Campbell, tape 87, recorded at Yarralin, 25 July 1986.

Many of these absent animals are the totemic relations of people who are still alive. The people live, and their totemic sites, songs, designs and practices live, but the animals themselves, the non-human descendants of the ancestral totemic figure, are gone. This is the case with Jessie and Nina, and their possum totem in their mother's father's Country. The site is there, and it contains a substance that brings good luck to women, so in that sense the possums are still active in the world. But these relationships too are diminished and diminishing. Jessie and Nina, with others, got the protection of the Aboriginal Areas Protection Authority for the possum site. They said that if the area were to be bulldozed or otherwise damaged so that the site and the mineral deposit were damaged, even more power would be lost to them and the Country.

Similarly, one of the major sites for Bilinara men is a hill (Mount Northcote) that is sacred to the northern quoll, or native cat. The senior man for this site, Hector Wartpiyarri, had seen this animal when he was young. He knew what he was talking about, and he also knew that it is not there anymore at all. Old Tim described the *parjita* as 'some sort of pussy cat, but he's devil now'. Old Tim used the term 'devil' as a gloss for what other people often termed 'spirit' (in the sense of 'ghost'). Devil or spirit is the living presence of something that is otherwise gone from the world of the living. Old Tim's words tell us that all these sites, ceremonies and relationships are with a creature who now only lives in the world as spirit, ghost or devil.

Big Mick Kangkinang (born about 1900) remembered the animal called wirimirimawu in Ngaliwurru language. It is a gliding possum, and its southern range once coincided with the southern side of the Stokes Range, in the same area where the boab trees and the kakawuli (yams) reach their limit. When Darrell Lewis and I were working on the land claim for this area we needed to know what a wirimirimawu was because there was a Dreaming site there. Big Mick described the creature, and the identification was clear. He was the only one who knew. When we told other people what Big Mick had said, they suggested that he was getting senile and did not know what he was talking about because there is no such thing. When we said that such animals really do exist further north, they agreed grudgingly that that might be possible, and they accepted Big Mick's word for the identification of this creature. Here again, people said that whatever it was, it was only spirit now. There was nothing more for that Country, and hence, in their view, nothing more at all of wirimirimawu in the world for them.

Finally, one can also consider some of the connections here. In Kayalarin Country, in the big black soil plains just south of the Stokes Range, there is a Dreaming site for possum and native cat. They were there together pounding *kayalarin*. Now the animals seem to be gone, and the plant is gone. The site is there, but what does it reference?

Billabongs and springs

A long-term white resident of the Victoria River District who has observed changes in the land and the waters over many decades states that erosion is severe and seems to be unstoppable. For example, earlier efforts to slow down erosion by throwing old tyres and old cars into erosion gullies are now known actually to speed up the process. The rivers are all becoming wider and shallower, and homesteads or communities built on the banks of rivers could go under one day. This perceptive person had observed that many natural waterholes have dried up. Indeed, the pastoralists' practice of bulldozing or dynamiting springs to try to get them flowing again has probably reached the end of its feasibility. The springs are drying up, and the waterholes in the big rivers are also drying up. It seems that the aquifers are not being replenished as rapidly as they are being emptied.

The results today hark back to the earliest days of settlement when one of the most contentious issues between settlers and Aborigines was water. Settlers wanted it for their cattle, Aborigines needed it for themselves. Most native animals also required water. There was an undeclared resource war fought over water, with tragic consequences for all, including water.

One of the few white men killed by blacks in the Victoria River Country was Jim Crisp. ¹³ The event was relatively recent (1919); it took place on Bullita Station, just north of Lingara. The killing was in retaliation for Crisp's murders of Aborigines. Riley Young explained that Crisp had been shooting Aborigines because he thought they were 'buggering up the water'. He saw them using fish poison, and he interpreted the incident as 'buggering up'. He may not have understood that the poison would have no long-term effects, or perhaps he took the view, as so many did in those days, that the Country (perhaps even especially the water) was there first and foremost for cattle and that the Aborigines would have to go. In any case, Riley says

¹³ Lewis (2012) documents the deaths of 15 settlers killed by Aborigines in the Victoria River District. A much greater number of Aboriginal people were killed by white men—eds.

he shot people over water, and they killed him in return. At least one and possibly two men identified as the killers were later shot by police (Schultz and Lewis 1995, 54) but any massacres following the killing are unrecorded in European documents (see Rose 1991). Riley also liked turning people's words around on them, and his response today to Crisp's reported allegation that Aborigines 'buggered up the water' was that they were walking for years and years and always 'buggered up' the water, because it was their water.

The discussion of the Rainbow Snake (Chapter 5) led Riley to talk about other parts of his Country where the surface and underground waters are receding, and he linked the loss of water to the loss of people. For me, few things are more indicative of 'buggered up' water than the loss of lilies. Racecourse Billabong close to VRD Centre Camp was a resource site for Dora and Doug when they were little, and it was full of lilies. Numerous other billabongs and springs held lilies, and every once in a while some of them still do. Others, though, are eaten out, and some have been empty of lilies for decades.

In earlier years the Pigeon Hole mob used to send bags of lily corms to VRD people. The lilies in the billabongs there came from Dreamings—some from a goanna who brought them from the river, and others from the Nanganarri Women. In addition, there is a Lily Dreaming at one of the billabongs.

Figure 8.8 shows a Dreaming site for lilies near Pigeon Hole. The stone is the source for water lilies (*mintarayin*, *Nymphaea macrosperma* according to Wightman 1994, 40). The lilies at this billabong are believed to have been placed here by the Nanganarri Dreaming Women, and the stone contains the life and Law of lilies. Anzac Munnganyi was striking the stone with green leaves; this is his Country, and it is his work to perform this ritual. In this case, however, his action was simply a demonstration the purpose of which is the proofing of evidence for a claim to land under the *Aboriginal Land Rights (NT) Act 1976*. Anzac explained the meaning of his actions: that this is a lily site, that the 'proper really tucker' comes from here. You sweep the stone with green leaves, and that pushes the lilies back to the billabong. You talk to the Dreaming, saying 'You make plenty tucker'. After the wet a big mob of tucker will come up. The (Dreaming) stone puts the lilies there in the billabong. Anzac was asked if he had a song for this place and he said, 'No song, just the words. Really true words.'



Figure 8.8. Anzac Munnganyi performing an increase ritual by brushing a Lily Dreaming during the Pigeon Hole land claim hearing, 1988.

Source: Photograph by Darrell Lewis.

If you look closely at the background of Figure 8.8 you will see a muddy billabong surrounded by trampled mud, but you will not see any lilies. This Country has been grazed by cattle for over one hundred years. The lilies disappeared in the 1930s, as near as I can determine. There are two closely related billabongs, and Hobbles explained that the traditional owners had been able to bring the lilies back to the other billabong, but not to this one. Rituals for lilies for this billabong are no longer performed, as it is believed to be a hopeless case under current land use patterns.¹⁴

Floral invasions

There is a huge number of introduced plants. Some, like the introduced pastures, have come in as replacements for Indigenous plants. Others are escapees from homestead gardens. Some rode in on the backs of camels, and some have arrived in trucks along with loads of hay (see Lewis 2002, 41–42). Those that survive are opportunistic: either they take advantage of disturbance in order to colonise ground where natives are unable to take hold, or they find conditions to be so favourable that they start to drive out natives. Under the Northern Territory's *Noxious Weeds Act 1963*, weeds are classed into one of three categories. Class A weeds are to be eradicated: they pose a significant threat but occupy a small area so there is good chance of eradication. Class B weeds are to be controlled: they are widespread and thus it is impractical to eradicate, but prevention of further spread should be possible. Class C weeds are not to be introduced to the Territory. All Class A and B weeds have the status of 'declared noxious weeds' in the Territory (Miller and Crothers 1998).

Although pastoralists are obliged by law to eradicate or control these plants, the efforts of those who make the attempt (and not all do) are unsuccessful. As is well known, eradication or control of noxious weeds must be done at a regional level. If there is not the political will to force pastoralists to take effective action, and if there is not the will to dedicate the kind of money that would be required if the government were to undertake the task, many weeds will remain uncontrolled.

¹⁴ In the manuscript, this section was followed by the heading 'Desertification', but there was no text—eds.

Daly spoke of 'rubber bush' as one of the plants that makes Country 'ugly'. *Calotropic procera* grows along all the roads in the district, as it thrives on disturbed soil. It is a declared noxious weed. Others abound. Perhaps the most disturbing at this time is that the weeds are now affecting the banks and beds of the Victoria, Wickham and other rivers of the region. Castor-oil plant (*Ricinus communis*), Noogoora burr (*Xanthium chinense*) and devil's claw (*Proboscidea louisiana*) are all declared noxious weeds; castor-oil plant and Noogoora burr have taken over long stretches of the banks of the big rivers.

The immediate effect on Aboriginal people is to make fishing very difficult because of the difficulty of river access when one has to walk through painfully prickly and clingy weeds and sit amongst plants, especially *Ricinus communis*, whose berries contain one of the world's most powerful poisons (ricin). Along with fostering that sense of disheartened anguish that I mentioned earlier in connection with lost species, the actual difficulties of getting to the river mean that people are spending less time fishing. The diet is impoverished and so are relationships. Yet another bush tucker of the kind that Country 'gives' its people is slipping out of the repertoire. I am advised by scientists that these and other noxious weeds are driving out native vegetation. This means that the foods that support the fish and turtles are diminishing. In due course (and perhaps extremely quickly), there will be a collapse in the fish and turtle populations of the larger lifesustaining rivers.

It would be nice to think that everyone would have an interest in keeping rivers healthy and accessible. However, with pumps, bores and the seemingly unlimited access to aquifers, it may be that pastoralists have little interest in ensuring the ecological stability of the rivers. Indeed, there may be a feedback loop here. In the 1980s pastoralists were urged to fence off river access in order to keep the cattle away from the rivers so that the degradation of the banks, and the accompanying siltation, could be curbed. Large stretches of the Victoria River were fenced off. Did cattle help to keep down the noxious weeds by trampling or even eating young shoots? The evidence is not all in, but this suggestion has been made further north where the invasive *Mimosa pigra* erupted into plague proportions when the buffalo were shot out of the country. Here, too, scientists have been reluctant to draw firm cause and effect relationships, but the correlation is suggestive (Walden et al. 2004, 12–13).

One type of floral invasion is the spread of 'woody weeds' that almost certainly is due to the cessation of Aboriginal burning and changes in stocking regimes. Common woody weeds in the Victoria River District are acacia species which can be controlled with proper burning, so the issue is not how to control, but whether there is a will to control. That will is unlikely to emerge until acacia scrub significantly impacts on profitability. For my teachers, encroaching scrub is blocking up the Country.¹⁵

Riley contrasted the state of the Country before the 1970s with its current state:

And when I been go long this land, land was really good. He was really good ... But now ... when we been start again, Country was little bit funny that day, I been looking at Country was little bit funny that day. I been looking at, 'What's wrong this one? Something wrong.' And after that I been look now, one year's time I been see em plants been get up. You go longa bush now looking for fruit, you can't see em fruit. You see em all these trees now ... And even if you go round la bush here, you can't see that karil, gooseberry, kilipi, tipil, purlkal, ngaringari, that kind been too much longa this—yarkalayin, mintarayin, that been already been clear. But you can't see em this time now. That's from what I been say: 'Country been change. Ground been change.' Because no fruit now. Where him gottem good fruit longa this ground, Country was look good. But fruit going away, Country gone, finish.16

Indigenous Country is not just 'nature' in some neutral sense. It is Country, it is creation, it is kinship, history, relationship and the future. Invasive species, therefore, invade kinship, history, the future, creation and much more. They generate huge ramifying issues that Indigenous people all across

¹⁵ A note here indicates that Debbie intended to add a summary from Lewis (2002)—eds.

¹⁶ The plants Riley discusses are: karil: Cucumis spp., probably trigonus; gooseberry: Physalis minima; kilipi: Leichhardtia australis; tipil: Antidesma parvifolium (unable to locate a specimen); purlkal: Vitex acuminata; ngaringari: Pterocaulon serrulatum; yarkalayin: Aponogeton vanbruggeni (unable to locate a specimen); mintariyin: Nymphaea violacea. Debbie intended to include here discussion on global climate change—eds.

Australia are really struggling with. Aboriginal people have grasped the existential issues of massive landscape alteration far better than mainstream Australians have. 17

An 'NRM' detour

In the public arena where 'nature' is debated, the prominent discourse of conservation and care is a discourse of management. In Australia, management is fastened down by the acronym NRM-natural resource management. NRM is explicitly or implicitly goal-oriented, and these days the goal is some form of sustainability. Types of sustainability clash, so there is a meta-goal of sustainably balancing conflicting types of sustainability—economic sustainability to be sustained without impacting on environmental sustainability, and both to be achieved within a society that has a stated goal of moving toward increasingly sustainable forms of social and environmental security. My personal favourite is the sustainability goal articulated by the Cooperative Research Centre for the Sustainable Development of Tropical Savannas (CRC-TS). In contrast to the name, the stated goal is sustainable habitation (of tropical savannas), and in this northern frontier context the goal seems to express an optimism the very necessity for which is scary: they hope that Australian people will be able to continue to live there.

There are many routes into a critique of NRM; mine starts with the unsustainable separation of nature and culture. This implicit platform for management is ecologically mistaken and is socially inept in that it excludes from the equation any mention of the very species that purports to be doing the management. The concept of 'resource' excises elements of the 'natural' world from their context and highlights them as if their main reason for being was to provide services. It implicitly or explicitly denies that 'nature' has its own ontological status. The concept of 'management' implicates the human, but mistakenly implies that it is possible for a subsection of one species to gain sufficient understanding of the context within which it is embedded to enable it to make good large-scale decisions about its own context.

¹⁷ Debbie had the following note here: 'Add restoration (ecological restoration) and discuss reintroductions in central Australia; requires different type of land tenure, different concept of production, different value of labour—that taking care of Country is productive labour. It probably hasn't much hope if in competition with pastoralism?'—eds.

Analytically, NRM looks like a disaster. The larger problem lies in the disjunction between short and long term. NRM is absolutely essential in the short term. Every day, every hour, people are making decisions that have long-term environmental consequences. There must be some guiding principles for how such decisions are to be made, and some goals toward which such decisions aim. In the short term, some forms of sustainability constitute reasonable and desirable goals. Increasingly, local knowledge, social goals and conservation management that cut across different types of land tenure all stand to undermine the strong dualisms signalled by the master acronym. NRM is in some contexts subverting its own epistemology and is definitely deferring the 'reckoning' (Athanasiou 1997).

In the long term, NRM works toward disaster because it is embedded in a set of epistemological errors, the consequences of which are ramifying and recursing exponentially. Short-term necessity and long-term disaster: NRM might be described as a self-fuelling arena of impending implosion.¹⁸

¹⁸ Debbie had a note here saying, 'Add the stuff about non-management—being called into action, Country telling you where to go and what to do (from forest lecture).' She also said, 'Add something about our species—we have to take seriously our huge capacity for damage; at the same time we need to take seriously the resilience of living systems, and the positive benefits that might derive from leaving things alone.' The 'forest lecture' referred to is Rose (2002)—eds.

This text is taken from *Dreaming Ecology: Nomadics and Indigenous Ecological Knowledge, Victoria River, Northern Australia*, by Deborah Bird Rose, edited by Darrell Lewis and Margaret Jolly, published 2024 by ANU Press, The Australian National University, Canberra, Australia.

doi.org/10.22459/DE.2024.08