# SHARING

Photo: Maria Taylor

Sharing with wildlife on author's property during drought of 2019–20.

After 30 years of living in the bush I know a bit about living with wildlife, but I did not know anything about building soil, regenerating the overgrazed, water-eroded, and sun-bleached sections of the property. I was about to find out more, visiting with some big landholders who were sharing the land with indigenous animals and encouraging the indigenous plants, with an appreciation of biodiversity and resilience. They had been learning in the past decades to live with the nature of Australia, rather than fight it.

A good anecdote about how to learn from indigenous inhabitants was told by zoologist Hugh Tyndale-Biscoe based on his field trips to western NSW where he and students stayed on a property near Booligal. The owner did not kill kangaroos but rather observed them as indicators of the health of his paddocks.

When the kangaroos left it was time to shift the sheep and spell the paddock. This happened through dry years and wet throughout the '60s and early '70s, reported Tyndale-Biscoe. The property retained good saltbush and much native grass and good sheep production at times when neighbours were destocking.[1]

Listen again to British-trained biologist and ecologist Francis Ratcliffe, who was hired by the Council for Scientific and Industrial Research (CSIR, later CSIRO) in 1935 to look into the severe soil erosion of central Australia, following less than 100 years of sheep pastoralism. He came to the unpopular conclusion that overhauling the previous ecology of native animals and plants was not the main solution.

Ratcliffe was a product of the imperial science that shaped Australian thinking. But he concluded that putting sheep or cattle on the boom and bust landscapes of Australia was based on some serious miscalculations and incompatible premises.

He concluded that "the only thing that would preserve the country would be 'consciously to plan a decrease in the density of

pastoral population of the inland' … to fit the social and economic order to the natural one".[2]

Today, there are farmers and other landholders taking up Radcliffe's advice and striving to become part of a more natural order while still successfully running a business on the land. In the past decades, there has been much successful experimentation with land regeneration to revive soil, water, and vegetation natural systems. Some without embarrassment call it farming in greater harmony with nature – they mean the nature of Australian landforms and weather.

Others have turned land into private conservation reserves, while still feeding sheep or cattle or growing some crops. There are also attempts to learn more from traditional Aboriginal land management practices and ecological understandings as part of an abiding relationship to this unique land and its unique animals and plants.

I set out to learn more from some of these innovators and self-taught researchers – people who have taken a different path from the traditional mixed grazing and cropping model. I wanted to learn how they included the natural fauna in these new farming systems. Most concentrate on building and sheltering soil as the basic ecology of their enterprises, bringing back the natural grasses, unlocking long dormant seeds, and keeping ground cover.

I wanted to know whether graziers committed to regenerating Australian natural systems continue to calculate that they have to shoot macropods to 'save the grass'? Alternately, does sharing the land with the wildlife bring land-care benefits? And what benefits, financial and otherwise, accrue to those who are forging the way with wildlife ecotourism?

Jock Marshall noted in the mid-1960s: "A considerable number of Victorian sheep farmers, living as they do in a State where kangaroos were long ago almost exterminated would be glad to

see a few roos hopping around their paddocks. A few intelligent and cultivated sheep farmers in southern New South Wales have already made their properties a sanctuary. They believe that it is worth running a few sheep less for the privilege of having a few wild marsupials on the place. Such people are rare, but it is hoped that their practice will spread."[3]

In 2019, I met people who think like that.

En-route to learning more about ecotourist potential, I came across this humorous endorsement for the value of wildlife tourism to Australia. Said a ranger on Tasmania's Maria Island, which is a wombat haven: "The tourists are in love with the wombats; so in love that we need to give them some education about how to interact with them." That led to asking for this promise: "I pledge, I will not chase you with my selfie stick."

Tasmania's Maria Island is a national park, and as well as wombats, it is home to Cape Barren geese, Forester (Grey) kangaroos, Bennett's Red-necked wallabies and Tasmanian devils. Tourists on Maria Island have doubled in number in the past decade – to 31,000 annually and climbing. Enthused one in an Instagram post: "This place is like the Galapagos of Australia!"[4]

## WILDLIFE TOURISM ON TRADITIONAL GRAZING PROPERTY

Terri Irwin, along with her late husband Steve, did much to popularise and say it's okay to love Australian wildlife – notably the slithery and snappy variety. Terri is still doing this work. These days, much of her time is spent filming segments for a television program called *Crikey! It's the Irwins*, along with her children Bindi and Robert, while working alongside some 500 staff at the family-owned Australia Zoo. The zoo now houses more than 1,200 animals on about 1,000 acres of Sunshine Coast bushland. There is also a wildlife rescue hospital. Terri tells me that the goal with every animal species in captivity is to also help the wild populations. It is

very much her goal to increase the appreciation and conservation of Australia's unique wildlife.

"When Steve and I married in 1992," she tells me, "we spent the first six years of our marriage filming, studying, and doing conservation work throughout Australia. I have seen a lot of Australia that has given me personal insight … and more recently I've seen thousands of animals that have come through the wildlife hospital that we opened in 2004 [at Australia Zoo]." The hospital has treated the whole range of Aussie native animals – including rescued sea snakes and turtles, flying foxes and other bats, koalas in need of chlamydia vaccination.

This is all good. But Terri wants to talk about the still unresolved and unequal relationship between humans on production properties and the common wildlife, particularly kangaroos. We talk about her family's conservation grazing properties in central Queensland and in the Queensland gulf country. Both properties are living experiments, in that they allow the natural wildlife – from dingo to emu to kangaroo – to co-exist and live peacefully.

In central Queensland, between St George and Roma, neighbours may still be shooting kangaroos, poisoning dingos, or fencing emus from their path to food and water, but not on Mourachan. Steve and Terri allowed the property to revegetate naturally after they acquired it in the early 2000s. An unsuccessful attempt at establishing young river red gums indicated that regrowth was the easiest path. It proved too difficult to keep the water up to planted trees during drought. Terri tells me that the plan now is to consult with an ecologist about habitat management by increasing the diversity of the plant life. The property continues to commercially run some cattle.

Mourachan lies in the brigalow (acacia woodland) belt – a landscape that has suffered extensive clearing. Their holding expanded from an original block of 25,000 acres to now managing 118,000 acres (47,753 hectares) plus a neighbouring block recently

added. (Terri's American heritage and Australian bush experience shows, with the preference for talking about acres rather than hectares.) "The intent was to manage it so things weren't being culled or killed on the property."

Steve and Terri started out with a project engaging the neighbours to document the presence of the rare Woma python. That worked out wonderfully, but what was disheartening was how much kangaroo shooting was going on. That's when they learned about Australia's industrial-scale kangaroo meat and skin industry, and how extremely poorly regulated it is. "I've seen really sad things with kangaroos," she tells me. "Probably 15 years ago, one of the first things we'd have to do when we go out to the property would be to humanely euthanise all of the injured kangaroos.

"Nobody is following these people around to see how they are killing the animals. There is also a sense if you are a landowner that you can treat wildlife in any way that you see fit without requesting permission or a permit. And, the manner in which the kangaroos are being killed was really eye-opening. It is essentially just a bushmeat trade."

## REBALANCE TO NATURE WITH WILDLIFE-FRIENDLY FENCING, TREES, LONGER GRASS

Rebalancing the property with nature required removing some of the property's features, and expanding others. For wildlife, that included removing kilometres of old fencing, or modifying it to wildlife-friendly fencing – a project that Steve Irwin started and convinced the neighbours would be okay. "So we did it, and all these little animals, fruit bats, and gliders were no longer getting caught on the top strand," Terri told me. "And the bottom strand is not hurting animals ducking under the fence that kangaroos prefer to do. It's been working for nearly two decades. I'm really excited about things like that."

Commercial kangaroo and sports shooters, who, it was observed, shot anything that moved, and who had been coming freely onto the property, were denied access. It was a lengthy process. After years, Steve and Terri got the last roo shooters off their land – although not before being told by the police in St George that some people with roo shooting licenses were ex-felons and dangerous people, with guns, and to stay clear.

Wildlife and flora studies and fauna counts took their place. A longer-term aim has been to establish endangered species breeding areas for bilbies and Northern Hairy-nosed wombats, Woma pythons and Yakka skinks, common to the area before European settlement.

Regeneration of trees and shrubs was a key factor in retaining good ground cover, and went hand in hand with habitat restoration. It also helped move on the kangaroo shooters. That was when the vegetation reached a point that the shooters could no longer see the kangaroos as they would on a cleared paddock, said Terri.

Glancing back at settlement history, it is not hard to see that the European radical tree clearing to gain more grass invited the native grazers to congregate in the first years after clearing. With more clearing and set-stocking keeping grass height low, the cycle would encourage constant new growth. Terri still sees it in the neighbourhood: "One of the ironies is people who clear-fell to get more grass. Then it actually attracts kangaroos, because essentially you are building a golf course. 'Wow, we'll come to your house!'

"On our property, we have different vegetation areas, some grassed areas, some treed areas. Less of a monoculture still allows good beef yields while inviting less roos." Along with creating other biodiverse habitat.

The property has a complete live-and-let-live policy for native animals, while also running 300 head of cattle that bring in comparable income per head to other traditionally-run properties. Terri

tells me they always have adequate grass, partly thanks to the vegetation cover they re-established. The contrast is most noticeable when neighbouring properties have suffered badly in dry years. Terri says the wildlife populations all now have stable numbers. The birdlife is fantastic.

## ADVENTURE TOURISM

The next step with the help of online marketing was to introduce wildlife tourism, billed as outback adventures or photography expeditions, with food and accommodation laid on. The venture showed that ecotourism brings in good money that can be reinvested in the land. Websites and social media have made marketing much easier for country people.

"People will spend thousands of dollars for an outback experience where they can see this wildlife. Seventy percent of international tourists want to see our wildlife. We know in Africa it really works – people protect the wildlife and have livestock and when people come on your property to see the wildlife, they pay a token fee. And we're doing it so that we preserve the emus and the kangaroos and the goannas.

"Where we are the emus are so sweet, they don't even protect the chicks from you. They're just really cruisy. You can go out and see the emus and kangaroos and dingos. Because we don't shoot them, you'll see them. Others could do that in a very short amount of time. Many people want to participate – whether they're bird watchers or photographers or artists – all walks of life."

Photo: Jennifer Parkhurst

Portrait of Kirra the dingo.

*"Let our dingo be. Look after the dingo, don't destroy him. The dingos would say: 'Let's share the country'."*

AUNTY MARIE WILKINSON, BUTCHELLA ELDER, FRASER ISLAND.

Terri Irwin knows other landholders that are proactive with conservation, and adds: "The thing is, Australians are ahead of the game, because they figured out farm-stay a long time ago. People want to share the country life, the farm experience. It's been very successful for us and we can reinvest what we are earning back into conservation."

The immediate worry is the cluster fences that segment the wider landscape: deadly hazards blocking wildlife corridors and access to water. As a large property, Mourachan can manage the wildlife presence, but the problems being created are regional. "You'll have these tiny little distorted gene pools and you won't have a healthy ecosystem," Terri notes. Disease risk mounts as populations become genetically less diverse.

The African experience has shown that where game farms tried to fence in particular species, it doesn't work. They learned to have wildlife corridors and to cooperate with neighbours. Beyond Mourachan, continued clearing, overstocking, and salination of the soil are ecosystem issues besetting the area's habitats and ability to regenerate – or indeed for graziers' ability to farm profitably over the long haul.

When we spoke, Terri was alarmed that Balonne Shire local government was promoting a taxpayer-funding cluster fencing exercise to extend across the whole shire, on behalf of a resurgent sheep industry that claims to be beset by wild dogs, most of which are likely to be feral dogs escaped from humans, not dingos. Terri tells me there has been no attempt at any environmental impact assessment of the cluster fencing. She'll be asking about it.

Never one to shrink from a challenge – although this one is proving harder than snake-handling – Terri was also intent on convincing the Queensland government about the economic value of linking tourism and conservation for remote areas. She notes that for a small government investment, another 100 (doubling

the current number in the whole state) Indigenous Land and Sea Rangers could be employed for remote tourism opportunities. That is still a modest goal. In comparison, the Irwin family's Australia Zoo alone employs up to 500 staff.

The ecotourism at Mourachan blends Australiana, like making damper and enjoying "an Aussie classic cup of tea," with wildlife encounters and nature walk-and-talks. River and wetland exploration are options. There are opportunities to photograph landscapes, relics, and old buildings on farm and in nearby town, backgrounded by the red earth – the picturesque iconography of inland Australia.

Iconic wildlife in this brigalow environment includes the emu and Eastern Grey kangaroos, Wallaroos/Euros and the Black/Swamp wallabies; bats and gliders; The Lace Monitor and two other goanna species; skinks, geckos and lizards; and a lucky person may spot the rare Woma python. Also rare and present is the Warty Waterholding frog. Birds include the well-known kookaburra, Hooded robin, tawny frogmouth, cuckoo, currawong, choughs and more. Many more birds fly along the Balonne River outside St George. Dingos are allowed to live at Mourachan. And there are introduced wildlife species as everywhere in Australia.

When we spoke, Terri said the grass had remained sustainable despite the decade of dry conditions: "In my experience where we have left the kangaroos and the dingos, if you fly over it, it looks like an island. Everything around it has been decimated but our property is always healthy and we have roos, dingos and also cattle. Neighbours have come and asked to agist cattle on our property.

"I find it ironic because if their methods of extermination of certain types of wildlife and their husbandry are all working: why are they asking the person with kangaroos and dingos and conservation methods to agist? The grass is always greener on my side of the fence, literally."

While the Mourachan managers cull feral domestic dogs, dingos are not proving a problem. "We have dingos and now that they are realising that they're not getting shot we can see them. And they are quite calm, they don't thrill-kill. We haven't lost a single calf, although they might go more for lambs." The bonus, she said, is that the dingos are really knocking the cats and the foxes. "I'm just not seeing the problem, other than we humans are propagating the problem with domestic dogs.

"And the kangaroos, I just don't get it. Why people hate these beautiful animals. But we don't want to surrender one blade of grass that isn't for livestock earning us money. In reality, you really can achieve balance. We have to find a way for people to earn a living without destroying everything."

What has she learned? "If you leave nature alone, your land flourishes more than if you're trying to play God and manage every aspect."

## RETURN TO NATURE AND REGENERATIVE FARMING

There's a promising sign on the gate to Severn Park, where Charles and Fiona Massy have accomplished a radical farming makeover to a more natural way of grazing their Merino sheep. 'Land for Wildlife' says the sign. I have one of these on my own gate – it lets visitors or passers-by know that people who live there protect and promote wildlife habitat.

On the road to the house, I can see on either side how the Monaro grassland is regenerating, with poa tussocks, stipa (corkscrew grass), and other natives, including danthonia, nine-awned grass, and native legumes.

Charles Massy is the author of *Call of the Reed Warbler*. Published in 2017, it is an acclaimed and comprehensive exploration of what has gone wrong with European farming and grazing methods, with case studies of alternative ways of doing things. The big picture is

that the traditional colonial methods are speeding the process of desertification in Australian landscapes. They also increase the risk of financial ruin to graziers and family cropping operations faced with the high costs of annual fertilisers, chemicals, and machinery to plough up and 'improve' the soils.

Elsewhere, family farming has ceded to corporate conglomerates that often double down with European traditional thinking about the land and its inhabitants as a resource quarry, establishing the latest wave of land and water exploitation for export products. Ultimately, these farming methods are not good for human health, he writes, extracting a cost from chemical exposure and lowered food and fibre quality due to the microbiology missing from the soil.

In Massy's book, I read a series of landholder stories told by farmers and graziers who are regenerating their land. Here was a path for my questions about integrating wildlife. Massy talked to more than 80 producers for his research, and recommended some I could fruitfully chat with, starting with himself. I have built on those regeneration case studies with thanks to the author.

I wanted to learn how sheep and cattle producers can make a living without killing off the native fauna and flora – the tradition since settlement. Along the way I started learning how working with nature turns out to be good economics – saving a lot of money that isn't spent on a shopping list of chemicals, superphosphate, and other artificial inputs for soil.

Charlie Massy started our conversation with an anecdote from a senior Ngarigo law man, elder Rob Mason who has been advising him on some land management approaches. Rob Mason has cultural memories that came through his grandfather: that somewhere in the 1860s his great grandfather speared a Jabiru stork on nearby Lake Bundawindirri, now a dry bed, just up the road towards Berridale from the property. The lake then was full of bird life, including Magpie geese, Blue and Yellow budgerigars,

and brolgas. Early surveyors mentioned seeing frequent fogs until midday in that valley, attesting to the transpiration water cycle function. "Within decades of overgrazing and clearing, we destroyed all that."

## GROUND COVER: KEY TO SOIL HEALTH, BIODIVERSITY, AND LIVING WITH WILDLIFE

Massy reflects on what land regeneration has done for Severn Park's 2,000 once-degraded hectares. The healing started with a major tree-planting effort and tree regeneration, keeping in mind natural contours and creek lines. Maintaining year-round healthy grass cover with plant diversity is another key feature of regenerative farming and natural soil management.

That is accomplished by strict rotational grazing and conservative stock management. A more natural landscape that is not grazed down to ground level, and therefore seldom exhibits the golf-course-greens attraction of new pick for grazing marsupials, is a tool that comes with this management method.

On one early morning survey across the countryside, he said he marvelled at myriad spiderwebs, still wet with dew and glistening between the grass clumps. The spiders catch flies, grasshoppers, and other insects. They tell this landholder that the biodiversity on the property is returning to healthy landscape functions above and below the soil line. "The fact we no longer get regular devastating wingless grasshopper plagues is another indicator of increasing health," he says.

Adding tree and ground cover aids moisture retention, even if just from dew and encourages soil organisms to get busy. They are an essential part of biodiversity, creating "a different, living absorbent soil structure" as he describes it.[5]

He tells himself that it is not necessary to catalogue everything, but just knowing the biodiversity is coming back is good enough.

He can see the wildlife returning. Not only birds and invertebrates, but the marsupials as well. In his book, he writes fondly about the wallabies that are now fairly tame around the place.

"As a kid we had no swamp wallabies or wallaroos. Now there are scores of them. With their cute little anvil faces and little paws and ears, the wallabies placidly examine me each morning. Only the other day, we had the excitement of discovering a dunnart (a small hopping marsupial mouse), a native bush rat, three new frog species, and two previously unrecorded woodland birds."

On regular walks around the property, getting to know plants and identifying animal tracks, Charlie Massy and his grandchildren often came across a quiet, solid, and large Wallaroo who spent his time on the green grass in the woolshed yards. They named him Mr Kev. His naming, wrote Massy, somehow made him a recognisable personality, with habits and extended family. Too bad, he lamented, few children today have the opportunity.

## WHOLESOME FOOD AND A TOP WOOL CLIP

Equally gratifying is the knowledge that the land regeneration and changed farming methods mean they are growing nutrient-rich food and achieve top class fibre with the wool clip. With holistic grazing management, he tells me, the sheep get a more balanced diet. The animals are continuously rotated every few days into fresh paddocks with greater plant diversity. This means better body weights and higher lambing percentages.

"Last year, due to this more even nutrition, we topped the Sydney wool market because ours was the only clip, in that drought year, that had high tensile strength: a key parameter for elite wool processing. We also have to drench far less, because the rotation breaks the intestinal worm cycle."

Charlie tells me his conversion to being an "enabler" (his description) of the land, rather than a person wedded to domination, came

with the realisation that his innate love of nature could now be given full reign. He sees this as including aesthetic as well as intellectual, emotional, even spiritual connections to the land around us, rather than viewing the land as an inanimate block waiting to be cleared of previous life, improved and exploited for profit.

His thinking was helped by developing a friendship with some Aboriginal people. "This allowed me to gain some understanding of their organic approach to and nurturing of country" – their ever-present connections to and responsibility for the land and what it holds. He wrote in his book that "until we acknowledge Indigenous people's dispossession and collaborate with them to jointly regenerate and care for country, we can never achieve proper reconciliation between people and country".[6] As one example, Rod Mason taught the Massys and others in the district about cool burning to clean up and encourage grass growth, and the complexity of the decision-making required.

Physical and mental ill health in rural areas, he ventures, may well be related to traditional European farming methods and divorce from nature. Chemical farming doesn't help, with some properties being encouraged to pour dozens of chemicals on their crops for the season.

## LONG-STANDING WILDLIFE SANCTUARY AND MANAGING THE ECOLOGY

From the New England tablelands of northern NSW, Tim Wright tells me in 2019 they're experiencing the worst drought since records started in 1850 – when his extended family started sheep grazing in the district. Some of the more shallow-rooted eucalypts are dying, he says sadly. Still, he has grass for his sheep, and he tolerates maybe 500 kangaroos (Greys and Wallaroos/Euros) sharing that grass (the numbers can be a problem, as the animals come in from neighbouring grassless properties).

The 3,350 hectares of the family property, Lana – with about five percent in hills and rocky country – are well-treed, both old-growth and planted. There is water: creeks, springs and bores on the property. But the key to having grass on the ground while the neighbours are buying in feed is a still-evolving system of rotational (or cell) grazing, that never lets the ground cover get close to being eaten out in any of the smallish paddocks.

After a near fatal end to his farming, brought on by the early 1980s drought, Tim made a radical sideways turn. It took four years financially, and longer for the land to recover. "I started to question everything," he told Charlie Massy for his book. "What I had learned in ag college; some of the scientific stuff in journals; I thought, 'there's got to be another way' or I won't survive here."

The answer arrived in 1989, with the work of Queensland agricultural scientist Terry McCosker channelling the work of Zimbabweans Allan Savory and Stan Parsons. They taught Australians about holistic planned grazing – that involved rotational grazing as a basic concept, together with rest and recovery of paddocks.

The secret, he realised, is not in having more land, but how you use what you have in your environment, on your land. He now sees himself as a holistic manager of his farm's ecology. The wildlife he may cherish the most are the soil microbes and insects, like parasitic wasps, bees, and beetles, that keep the system turning over and functioning healthily. The methods are completely strange to traditional broad acre graziers focused on pasture improvement, annual ploughing, sub clover, legumes, and improved varietals and aerial application of superphosphates.[7]

Massy in his book describes the regenerative approach as maximising solar energy function through grazing management and grass utilisation, avoiding overgrazing any paddock. Tim Wright now has 300 paddocks averaging 20 acres, divided from 50 larger paddocks when he started down this road.

It's not just about the insect life. Diverse ground cover is the most important aspect, he tells me, because of its capacity to store carbon and add organic matter. The secret is also in having a good water cycle. "We work our ground cover on kilograms per hectare with a range of plant species. What we've forgotten is that the monoculture society and monoculture farming is the worst thing we can do because it upsets the balance."

## VALUE OF NATIVE PASTURES WITH VARIETY OF GRASSES

"We have our native grasses, including cool season perennials," Tim says. "They're coming and going all the time, and we refer to this as a 'state transition model.' The 'state' meaning that grass is from seedling through to seed stage. It is in transition because you're going from cool season to warm season growth. Our native grasses are still in the warm season phase, and the cool season perennials are all sitting there, though you wouldn't know it. They start growing in June and they'll always be green no matter the frost.

"You have different grasses which grow up on the ridge, grasses that grow down lower and they've all evolved over millions of years. [Traditionally] we go along and spray it all and say we have to improve pasture. But economically it's one of the worst things you can do, because it's short-lived and during a drought you have to re-sow most of what you've already sown."

Retaining ground cover by resting paddocks, while rotating large numbers of herbivores who leave their manure, also means less added fertiliser – or even that none need be applied. The activity of herbivores is intrinsic to the success of this system, whether it is returning organic matter through manure, or assisting with their hooves over a short period to loosen the soil crust so seed can more easily come to the surface.

Native herbivores also assist with the fertilising and in spreading seed through their droppings. Tim has largely stopped ploughing.

Whilst this is counterintuitive, stocking rates can be high, as Tim is showing, as long as the sheep are not set in one place, but are in constant rotation.

## WORKING WITH ALL THE WILDLIFE, RETAIN TREES

Related to the famous Australian poet and environmental writer Judith Wright, Tim and his family have a history in education, agricultural innovation, and appreciating the native fauna. Tim's father declared the property a wildlife reserve back in the '60s, and today koalas live here as well as macropods including Wallaroos/Euros, Pademelons and other wallabies, along with the Eastern Grey kangaroos. Echidnas and platypus are other cared-for residents.

Some get a helping hand in the drought. "Only last week we fed koalas," Tim told me. "This time of year is mating time, so you can hear them calling out near our house." The trees on the property support eight endangered bird species according to a recent survey. "I put that down to our diversity of trees," he says.

Does Tim see benefits for the farm by integrating native animals? Big benefits, he says, and kangaroos are part of that – acknowledging my interest in them. He had already told me that he understood the mob structure with the role of the alpha males, saying that shooters should not take them out because it can lead to greater populations as well as genetic weakness.

Balance is the key. "If you haven't got the balance with the birdlife, the water, the turtles, the insects, and the grasses then things will be out of balance. That's when you get things dying back, like trees for example. The landscape suffers. I work with the wildlife. I don't have an issue with them at all."

I ask him where someone would start, and how long would it take to emulate what he has done on Lana. It won't take long, he says. "The first step is awareness. If they accept that tomorrow is another day, they can move toward a better frame of mind and start

accepting alternatives – which I did 30 years ago. I started to question what I was doing and why I had to borrow money to survive."

Continuing education is a theme for all regenerative farmers I engaged with. Tim Wright is no exception. "Holistic management isn't just about agriculture. It's a way of thinking and decision-making. You ask why – why do I have bare ground? You then address this by looking at what you can do to change your management practices and treat the cause rather than the symptom."

The surge of tree clearing in NSW, including for cattle production, is mentioned. Simply from a farming standpoint, particular with a drought and the water needs of cattle, tree clearing is no answer and worse. "I'd rather see education aligned with regulation so that farmers learn the benefits of the trees. It's not there. If we want to point the finger, it's the government being totally oblivious to it."

And he adds: "We've got to take more note in terms of Australia's ancestors, the Aboriginal culture. How did they survive? What did they do? We're very different in that sense in that we are more industrialised. But they had the ability to manage the land in a way that survived the intense droughts."

## SOUTHERN NSW GRAZIERS: THE BENEFITS OF NATURAL FARMING, ECOTOURISM

Grazing stock naturally, and merging biodiversity protection with production and a tourism business didn't come as a matter of course to the Butt family, third- and fourth-generation farmers in the capital region outside Canberra. But since 2008, when they visited Tim Wright's New England property on a Landcare-awards field trip, they haven't looked back.

These days, the Butts hardly drench their sheep. They haven't used fertiliser in 20 years on their 3,500 acres (1,300 hectares) of grazing land. The animals, feeding on a more diverse plant mix, in

rotated, conservatively-stocked paddocks, are in better health and the wool results are stronger and more consistent. 2,500 acres (1000 hectares) additional woodland has been fenced off as a reserve.

I met Debra Butt, who manages the farm day to day, at a Landcare meeting in the region. This meeting was focused on how to encourage and protect biodiversity while making a living off the land. She told the story of her own and her parents' journey from conventional to regenerative farming. Later I was given a tour of the property, marvelling at a cluster of six-foot healthy grass trees (Xanthorrhoea) in their Picaree Hill reserve, and we talked further.

"Until the 1990s the property was conventionally-managed," she told me. "I'd go out to hand-feed the sheep. There were bare paddocks. I felt like I was pouring money on the ground and thought 'if this is what farming is all about, I don't think I want to do it.'"

Now they manage for 100 percent ground cover at all times. Debra is not the first grazier to tell me they have discovered that with higher ground cover the place is less of a magnet for kangaroos that like new green pick. This pushes the lethal management approach down or off the radar.

And there may be a growing awareness that the kangaroos, wallabies, wombats, and birds add value to this family's long-standing trail-riding business. The trails wind through their reserved land. Enjoying a glimpse of native wildlife, along with the trees and understory, like those grass trees that caught my eye, adds aesthetic value.

Debra's obvious satisfaction with preserving the habitat of less obvious native animals, including the Wedge-tailed eagle, or a shy marsupial, the mouse-like dunnart that is making a comeback on the property, is part of the lure of managing for biodiversity. Koalas used to live in this area. There might be a comeback.

"The exciting part is to do both conservation and production,"

she says. The added economic benefits of diversification to tourism benefits equally from conservation. In some years, the income from the trail-riding matches the wool cheque.

Unlike some regenerative farmers, the Butts don't use mathematics so much as observation to assess when stock should go on or off a paddock. "We won't put the stock back on until the plants are fully recovered," says Debra. Their 1,200 fine-wool Merinos are at their lowest number compared to the family's previous stocking rates. Those Merinos are now matched to carrying capacity, rather than pushing the numbers envelope. Quality has trumped quantity.

Managing the threat of predators has called on some additional lateral thinking. The family has deployed three alpacas for guard duty. They chase off canines. Her father was sceptical, admitted Debra. But that ended when an alpaca stayed guarding a sick sheep while a human went for extra help.

Debra and her partner Paul Foster also keep an eye on the growing sustainability market, which calls for both a greener approach to farming and responding to animal welfare issues, like an end to mulesing. (Mulesing is a painful skin removal process aimed at preventing rear-end wool growth and fly strike.) Ten years ago, the family took the step to end mulesing and use alternative methods. I mention that two major Australian retailers recently announced their woollen products would no longer be sourced from sheep that have suffered mulesing. Premium prices are a promising horizon.

## REDISCOVERING THE NATURAL BALANCE

The need to maintain the land and its flora and fauna in 'balance' is a shared understanding between the regenerative farmer and Indigenous Australians.

Bwgcolman elder and artist Billy Doolan was born on Palm Island after his parents were separately relocated there. He is now a resident of Townsville, and a citizen of the world – having been

invited to places like Italy and Hong Kong to share his intricate painting style born from a north Queensland tradition. His totem is the brolga, the graceful indigenous bird that often features in his work, and also the owl from the other parental side. Queensland post-colonial authorities threw people from 51 different Indigenous groups together on Palm Island. That brought together many totems – animals that cannot be hunted, harmed, or eaten.

Traditionally, totems balanced conservation between different Indigenous groups and their country. Eating another clan's totem gives him pause, said Billy Doolan. Offence and disrespect might be signalled.

Art, he says, is the only clear way he can now express himself. Traditionally, his people and other First Nation groups told their stories, their history, and understanding of living with the land and its creatures through art, song, and dance. One thing he wants to express is the understanding that things in modern culture are out of balance, and that there needs to be more compassion for his people and for the environment.

As a saltwater man, he is keenly attuned to the marine wildlife. The balance there has been lost, he told another interviewer. Too many turtles are taken as by-catch with the help of modern fishing machinery.

Without being prompted by questions, he tells me some things about the natural world – things that seem to have escaped many conventionally-trained managers of Australia's wildlife as they apply lethal methods of wildlife control on behalf of economic interests.

"Animals have their own laws. You take the alpha male – they keep everything in order from mating to feeding. Population is controlled by the alpha. Without them you see things going unbalanced. Animals of all types also depend on each other. They live by their laws too. Nature is truly magical. I've heard the old people say that and it's true. One only has to look."

Billy couldn't agree more with regenerative farmers in 2019. "You need more native grass cover," he says. Also, trees. Why cut all those trees? He has been told by cattle graziers in Queensland that trees are removed so the landholders can to keep an eye on the animals and make them easier to round up. "Then comes the rain, erosion, wind blows all the topsoil away."

We touch on ecotourism, and he tells me his own northern country has beautiful highly spiritual spaces and landforms. Visitors to Australia find the oldest landforms on the planet, he says. There is money to be made through ecotours, encouraging painting, fishing, walking untouched areas, and story-telling around a campfire.

In the old ways, he says, "we danced the trails, waterholes, animals. We were part of nature." Not separate as a dominator, I understand from this statement. "We walked with the animals. We are true children of the earth; it provided what we need. This place was virtually untouched when Captain Cook came. Animals were the ones that did all this," he tells me. He mentions the soil-enriching worms, insects that pollinate, eels that clean the rivers, and marsupial grazers with their soft feet unlike the hard-hooved animals that came with the invasion. "That's why we had the beautiful grasslands."

This man is an artist, not a university-trained agronomist or conservation biologist. But from traditional knowledge of what the land needs, he knows. "It's the native animals, they keep the system going."

I am reminded of this statement on a recent bushwalk in a national park near me in the foothills of the Snowy Mountains. The valley where we walked had abundant macropods, Red-necked wallabies, and Eastern Grey kangaroos. The healthy grassland, dotted with native trees and picturesque rocky outcrops, and bisected by chain-of-ponds watercourses, made me think of the park-like environment described by early settlers.

This was no artefact of Aboriginal burning. It was a balance between the plants and animals that existed here. Drought conditions in this part of NSW, as elsewhere, were much more evident as we approached the park in the grazed-off sheep paddocks dotted with undernourished stock.

"I'm a great-grandfather now," Billy told me. "I want my grandkids to see the brolgas dancing. There is hope if people make changes to heal the land and live with the native species. Mother Earth can heal herself if we help. Don't overharvest, overfish, let them live, eat something else." He's speaking of prawns now. "Let them breed. If people keep doing what they do, things are going to be very bad. No water is going to be the end of us.

"Everybody is responsible to look after this beautiful country. It's just common sense."

Photo: Gary Bell / OceanwideImages.com

Brush-tailed Rock-wallabies.