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Of grief, spirit and hope: personal reflections of the 2019–20 wildfires

Noel Webster (Uncle Nook), Lucas Bluff, Melinda L. Moir, Jess R. Marsh, Daniella Teixeira, Jenny Gray, Libby Rumpff, Daniel J. Rogers, Fern Hames, Bruce Pascoe and John C. Z. Woinarski

Introduction

Our lives are marked by love and grief and hope. The chapters in this book are largely dispassionate accounts, tallying losses of nature, and describing actions taken for its recovery. However, although such knowledge is necessary, it is not sufficient. We could not complete this book without recognising that those losses of biodiversity – the damage to country – also deeply affected our society. Many of the contributors to this book knew that country intimately, valued it immeasurably and had spent much of their lives trying to understand and nurture it, to live within it. We grieved for what was lost, and for what this loss may foretell of our future.

The exceptionalism of the 2019–20 wildfires may have caused loss at a scale not previously witnessed in our lives. But equally striking was the extraordinary response, of communities bonding together to do whatever was possible to heal the wounds, to volunteer, to collaborate, to donate. Counterpointing the calamitous losses, this community spirit was inspiring – a recognition that our lives would be diminished by, could not afford, and most importantly would not numbly accept, loss at such a scale. We would do whatever was possible to support recovery, to restore country, and to act to reduce the likelihood of comparable devastation in the future.

So, in this chapter, we seek to do something different. We invited personal reflections of what the consequences of these fires meant to people, and of the emotions that drove them to help recover nature after these fires. We collate and interweave these perceptions around three linked themes: loss, spirit and hope. Because hope without acknowledging loss is an illusion, and spirit is necessary to transform hope into change.

Personal reflections

Noel Webster (Uncle Nook)

Descendant from Walbunja and Murramarang Peoples of the New South Wales South Coast

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Sandstone emotions

My legs are shaking.

The 2019–20 wildfires may appear gone, but an eternal recollection is etched deep within my veins, blood memory of an account that will traumatise me until the day my eyes lay at rest. The guilt, the shame, the hurt and anger. I take blame contemplating my actions: could I have done more to look after our beautiful Country.

Where to for now? The recovery is it for me, for community or Country; it's all the above but where to start?

To be honest, I'm frozen with fear and have been sitting on the peripheral, evaluating the harm from the outskirts, not deep viewing only seeing the environmental aftermath, but I live in a cultural landscape where there is the holistic connection between, plant, animals, people, elements and earth.

Sandstone Country between the Shoalhaven River (Bugelli) and the Clyde River (Bhundoo), a beautiful place enriched with Cultural Values, evidenced through rock art assemblages that span across our river systems and connect the coast to the hinterland.

Are they intact, who knows, too scared to look, why, because of the anger and hurt I have experienced through the peripheral view? My shaky legs – is that an excuse not to look, not even.

Whose job is it, who's going to step up to the plate or do we do nothing and hope for the best, don't even anticipate it. It's our job, needs to be done, and there is no justification to sit back and hope.

The anxiety of the unknown, we need to know the impacts.

Ok, I've bitten the bullet and am planning to look, alone, no way, but is it fair to drag family, friends and community along for my safeguard, is that just as bad as doing nothing, what about their hurt and the way they feel. Will I be triggering their emotion and making them as angry as me, taking them back and generating their blood memory.

Time will tell, we take our first footstep next week.

Lucas Bluff

Lucas is a zoologist with responsibilities for biodiversity management in Gippsland

Notes on grief and hope

The words 'grief' and 'hope' are too simple and too strong to describe my emotions around the 2019–20 bushfires. My response has been shaped by more than a decade of biodiversity management in Gippsland, including leading fire ecology projects, visiting hundreds of sites with different fire histories, conducting landscape-scale fire-management planning, and being involved in emergency response to some half-dozen major bushfires.

Instead of grief I have experienced sadness and frustration. Sadness – at the loss, at least for a while, of aesthetic pleasure in some places that I enjoyed in the past. Open rainforest understoreys; stands of big wet forest; sites occupied by rare species … some earmarked pages have been torn from my mental catalogue. Frustration – because of lost opportunities for future study. Our ability to understand the composition of areas unburnt for decades has now been seriously depleted. Do long unburnt sites *really* have higher biodiversity value? Much harder to answer now. But grief – no, that would only come with knowledge of permanent or absolute loss.

Even events as large as the 2019–20 bushfires are not monolithic, nor, in isolation, are they likely to cause permanent loss. But by invoking this broader perspective – fire *regime*

over fire *events* and *combinations* of threats over *single* threats – to deny grief, I must also accept that it erodes hope.

Like others I have treasured the moments of post-fire hope found in epicormic shoots emerging from charred bark, delicate fronds unfurling in a bare landscape, a carpet of orchids, the delight when birdsong returns. But if one interprets the 2019–20 bushfire season as a card drawn from the progressively stacked deck of climate change, long-term hope is harder to summon. My pessimism is twofold: that an increasing frequency of million-hectare fire seasons in Victoria will cause cumulative loss of natural values; and that our societal reaction may pressure fire management agencies in ways that further constrain our options. My main hope is of being proved wrong.

Melinda L. Moir

Melinda is an entomologist whose research included studies of an insect species made extinct by the 2019–20 wildfires.

One documented invertebrate extinction, how many more were lost?

The Australian wildfires of 2019–20 were the final death knell for a tiny pinkish blob of an insect, *Pseudococcus markharveyi* or the *Banksia montana* mealybug. The loss of such a small inconspicuous insect that only a handful of people ever saw alive may appear meaningless, but to me it represents the decline and loss of countless unseen invertebrate species. This species was 'fortunate' enough to get discovered, lodged in collections and given a name. But how many other invertebrates are out there, lingering on the edge of extinction, as yet undiscovered? How many will never be discovered because they were lost in the massive wildfires?

It was pure luck that *P. markharveyi* was discovered in 2007; even though its host plant was included in my postdoctoral study of herbivorous insects on threatened plants, 'vacuuming' plants did not detect the bug like it did other insects. The mealybugs cling tightly to the underside of curled leaves or within the very hairy flowerheads of the montane banksia, ensuring that their removal is difficult. Instead, the mass feasting of hungry ladybird beetles on unfortunate *P. markharveyi* gave them away. By the time I stumbled across these innocuous creatures, there were very few host plants left in the Stirling Range National Park of south-west Western Australia, and *P. markharveyi* only resided on the very oldest plants that had escaped a fire in 2000.

Despite the state of decline, I hoped that the mealybug could ride off the back of the fantastic work of the flora conservation teams. The botanists had worked hard for decades on recovering *B. montana* both *in situ* and *ex situ*. For over 8 years I was involved in different conservation actions for the mealybug (nominating for state and International Union of Conservation of Nature (IUCN) threatened species lists; monitoring; *ex situ* translocations; searching for other populations; and working with experts on the genetics). The next step was apparent; seeding young *in situ B. montana* populations with the mealybug. We just needed to wait until the young seedlings were big enough to support a few mealybugs.

Little did I know that time was very short.

Two massive wildfires, 19 months apart, finished off the only confirmed populations on the summits of the Stirling Ranges. This leads me to wonder what happened to the rest of the diverse and threatened montane invertebrate community of which *P. markharveyi* was a part, including a stunning peacock spider (*Maratus sarahae*), a series of Gondwanan spiders (*Perissopmeros darwini*, *Calcarsynotaxus benrobertsi*, *Bertmainius colonus*, *Zephyrarchaea robinsi*), a carnivorous undescribed snail (Rhytididae snail), a tiger millipede

(*Atelomastix tigrina*), an undescribed keeled millipede (*Antichiropus* sp.), a plant louse (*Trioza barrettae*), and an undescribed genus of a strange flightless Dictyopharidae bug. To say that these fires depress biologists is an understatement – to me it is undisputable proof of the accelerating sixth mass extinction event.

I haven't been able to bring myself to revisit the Stirling Ranges since the fire that killed the last of the *P. markharveyi*, over 2 years ago.

Jess Marsh

Jess is an arachnologist and a Kangaroo Island resident.

Life hanging on a thread

I live and work on Kangaroo Island, researching spiders and other invertebrates. One of the species I work on is the Kangaroo Island micro trapdoor spider (*Moggridgea rainbowi*) and I don't think I'll ever forget the first time after the fires that I got out there to find out how this species had fared. It was probably a changing point for me; before then I was of the belief that, yes, these fires were big and the human impacts were huge – friends lost houses and farms, everyone was so busy fighting fires or helping out – but fire is natural and species are resilient. But when I saw first-hand the severity and extent of the fires, that all that was left of the trapdoor spider colonies I had known were burnt empty holes, entire habitats reduced to blackened shells, the scale of the fires and the impact on our ecosystems really hit me.

Since then, I have been out most months, surveying the fireground, and it has been a privilege to see the land in this state of transition and regrowth. The positive finds make the effort worth it: from finding surviving Kangaroo Island micro trapdoor spiders in small unburnt remnants (Fig. 34.1) to the feeling when, after months of surveying, I found a single surviving Kangaroo Island assassin spider, a species we feared could have been

Fig. 34.1. Many known populations of the Kangaroo Island micro trapdoor spider were destroyed by fire, but here a spiderling was found after the fires. (Photo: Jess Marsh)

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driven extinct by the fires. Many species are likely now imperilled, and many face ongoing threats in to the future. These fires were big, but they are unlikely to be the last, and I believe it's our job now to learn from them and to be better prepared for the next ones.

Daniella Teixeira

Daniella was completing her PhD research on glossy black-cockatoos when the 2019–20 wildfires ravaged Kangaroo Island.

More than just glossy black-cockatoos: Black Summer and my grief at a changing world

There is a word that describes feeling homesick when you're still at home: solastalgia. It captures the grief we feel when our home is threatened or changed. The fires of 2019–20 ignited a deep sense of solastalgia as they tore through places I know intimately. Kangaroo Island was one such place; I'd spent the previous 4 years researching the nesting behaviour of the island's endangered glossy black-cockatoos (*Calyptorhynchus lathami halmaturinus*).

I remember my despair as maps showed the footprint of fire spreading east across Kangaroo Island, burning one nesting area after another. On returning to the island, I found landscapes that were previously rich in life transformed to ashy 'moonscapes' (Fig. 34.2). Plastic nest hollows were melted, and iron collars, normally fixed to tree trunks to protect nests from predators, were splayed on the ground.

The fires changed my perception of what it means to 'do' conservation in today's world. For a long time, I ruminated on feelings of not being good enough. I left Kangaroo Island knowing that, although we can improve the trajectory of threatened species, intractable

Fig. 34.2. Daniella Teixeira in a once familiar landscape on Kangaroo Island, transformed by fire. (Photo: Nicolas Rakotopare/Threatened Species Recovery Hub)

Fig. 34.3. One of the lucky ones. A female glossy black-cockatoo flies out of her nest hollow in a sugar gum that escaped the wildfires. (Photo: Nicolas Rakotopare/Threatened Species Recovery Hub)

problems like climate change demand a new era of conservation. We need to be more creative in our thinking and bolder in our doing.

I'm often asked, 'Why should we save the glossy black-cockatoo?', as if their existence alone is not sufficient. My response is usually, 'It's not about the glossy black-cockatoo. It's about how we value life'. With every extinction, the world becomes less rich, less beautiful; and, in the words of poet Mark Tredinnick, 'the living world grows less Alive'. When we lose species, we lose billions of years of evolution; losing such complexity is a huge misfortune.

Evidently, my solastalgia extends beyond what was lost in the 2019–20 fires. It's about this whole, changing world. Knowing that countless species and ecosystems have been lost, and will be lost, in my lifetime, due to problems that I inevitably contribute to, is a difficult truth to accept. But this has only strengthened my resolve to contribute meaningfully to saving species.

I find hope in the birds' resilience. A month after the fires, glossy black-cockatoos were nesting in the habitat that remained (Fig. 34.3). We now know that over 450 birds survived by September 2020. In post-fire surveys in south-east Queensland, which also burnt, I found birds in areas that had experienced low severity fire. These observations certainly do not mean that everything is good, but they do remind me that there is resilience in nature. And for that I am hopeful.

Jenny Gray

Jenny is the Chief Executive Officer of Zoos Victoria.

Fighting extinctions

We all know where we were in December 2019. Smoke covered our skies and the daily news revealed an unfolding tragedy of unprecedented proportions. Every day we watched with dread as fires expanded across Australia.

Fig. 34.4. Providing food supplementation to help improve breeding success for the threatened mountain pygmy-possum. (Photo: Jenny Gray)

On 23 December 2019, I was in the Victorian High Country. Sitting on a balcony at Falls Creek, I saw that the sky was an unhealthy grey. With fires hundreds of kilometres away, the smoke served as a warning of the approaching destruction. I was on a call to Jon Paul Rodriguez, the Chair of the IUCN Species Survival Commission, talking about the partnership between zoos and aquariums and the IUCN Species Survival Commission to reverse Red List trends. There are days when our efforts to save every species from extinction seem impossible, days when the impending species catastrophe overcomes us like the grey smoke that filled the sky. And there are days when our resolve hardens and we commit to doing everything we can to fight for all the creatures that share this planet. Most of all, there are partners that remind us we can win this fight when we work together and use all the tools and resources available.

The 2019–20 wildfires served to engage and mobilise our local and international communities to act against the impending crisis of climate change and the threat of extreme weather and fire events on species. In addition, the fires brought together a wide range of professional conservation organisations, governments and the private sector to address the impacts. For a moment in time the attention of the world, from small children to billionaires, focused on the situation in Australia. The smoke of a thousand fires was experienced around the world. And the world reacted: fire fighters and vets arrived, and we mobilised professionals and volunteers. We could not be bystanders.

After the fires we assessed the loss, to humans and to biodiversity. We also assessed the need to help in the recovery of nature. Our ability to help the recovery after a catastrophic event is limited. It takes time, money and skill. At worst we can only count the cost; at best we can assist in removing compounding threats allowing species to bounce back.

Sometimes we just buy a little time, to allow species to survive long enough for their habitats to recover.

I was in the high country to visit and support the work of Zoos Victoria in supplementary feeding of mountain pygmy-possum (*Burramys parvus*). The lack of Bogong moths (*Agrotis infusa*) over the prior 3 years was impacting the breeding of this critically endangered marsupial and Zoos Victoria was trialling supplementary feeding during the critical period for female possums. The work is hard and tiring: crossing unstable boulder fields to fill purpose-built feeders and to change camera trap cards to secure evidence and knowledge of the access to food (Fig. 34.4). Little did we know that only 5 months later mountain pygmy possums in New South Wales, their habitat ravaged by the 2019–20 wildfires, would benefit from this trial: the food developed and trialled in Victoria would become the saviour of these small mammals.

Libby Rumpff

Libby is an ecologist and decision scientist who conducted many regional workshops after the fires to help coordinate responses for fire-affected species and ecological communities.

Clearing the smoke

There was claustrophobia, brought on by weeks of smoke and breathing in a heady mix of charred landscapes and substances I'd rather not think about. Smoke was the beast that fed anxiety and guilt. We were all pinned down, unable to escape, the once steady horizon no longer discernible. The soundtrack for the summer is still vivid, filled with ABC radio presenters working hard to pronounce the names of towns in the path of the fire, provide updates and give voice to stunned and grieving locals. And when the rainforests started to burn and the ecologists were projecting the number of animals impacted, it seemed there was a very public realisation that there was a loss of life that we don't often tally, that we don't understand well.

I knew I wasn't alone in feeling a sense of hopelessness. Pleas on social media, the international spotlight, governments announcing funding packages: the money was flooding in from everywhere. And this is where I got involved, as a member of an expert panel for the Australian Government, tasked with prioritising action for affected species and ecological communities. It was the collaboration with those involved in recovery efforts across the most heavily impacted regions in New South Wales, South Australia, Queensland, Victoria and the Australian Capital Territory that cleared the smoke. When the list of priorities is immense and the impacts are not yet understood, how do you make decisions about what to do, and where? How do you plan for a future where such fires are likely to be more commonplace? I asked questions, and I listened. These were people working together to create opportunities from the ashes, to plan for the future.

Alone, grief can floor me, but when I can see and talk to others, it unites. I found inspiration and hope in others. Yet there is no deluded sense of security; I see the past, the likely future, the tangle of threats and management applied to our landscape, and the shifting baselines for our ecosystems, plants, animals and fungi. It terrifies me. But if I don't keep moving, and trying, then the smoke descends and quashes hope. And I refuse that.

Dan Rogers

Dan is an ecologist with the South Australian Department for Environment and Water.

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The power of community

Kangaroo Island is one of a small number of places in the world to which I am connected. Not by heritage, or even by the island's objectively spectacular wildlife and natural aesthetic. This connection was born of knowledge, recognition, familiarity. Intimacy. A place that, given time, grabs your soul and doesn't let go. Those of you who have deep connection with a place, as I'm sure most of you do, will know what I mean.

My first interaction with the Kangaroo Island wildfires was via a map, on a screen: an abstraction, of the smoke and heat, of the intense pyrrhic dance between air and ground and life. What happened next, however, shook us all. Ultimately, ~200 000 ha – half of the island's total area – burnt in December 2019 and January 2020. At least 80% of the known habitat for many species already threatened with extinction. We were facing the real possibility of watching a mammal species – the Kangaroo Island dunnart (*Sminthopsis fuliginosus aitkeni*) – go extinct before our eyes. On our watch.

Close to 2 years on, the visceral response to the memory of such devastation remains. Surprisingly, perhaps, what remains the most emotive memory for me, more than the impacts of the fires, relates to the response of friends and colleagues, from many walks of life, from across the country. A number are contributors to this volume. The generosity of people, to offer all the support they were able, at a time when they were often personally suffering through the worst fire seasons in modern Australian history, still takes me aback. Receiving phone calls, offering assistance, while the fires burnt. In the small town of American River, we hosted close to 100 people (Fig. 34.5), not more than a month after the

Fig. 34.5. Participants from the American River workshop visit a feral predator exclosure set up after the fires on Kangaroo Island. (Photo: Dan Rogers)

fires, there to collectively offer whatever they could, to ensure that we would not allow species to go extinct. Such passion, such intuitive generosity, will stay with me, and I will always be grateful to those who gave it.

Nature conservation, in a world of such overwhelming change, can be a tough game. But what the fires on Kangaroo Island taught me, more than anything, is that it's a game that we're not in alone. We belong to a community who have such diverse experience, and who are incredibly knowledgeable, ferociously passionate and deeply generous. The power of that collective is enormous and, particularly when I think about global extinction, I remind myself of that power. It gives me hope.

Kangaroo Island, its unique biodiversity and its community are recovering from the fires, more slowly for some than others. We now know that some species are far more resilient to such events than we gave them credit for, although the tireless recovery efforts of many people, over many years, have certainly helped. What I know is that the strength of the partnerships, developed over years leading up to these events, was fundamental to how we were able to respond, and how we were able to support each other, during and immediately after. Those partnerships will, no doubt, have a legacy well beyond.

Fern Hames
Fern is the Director of the Arthur Rylah Institute for Environmental Research

The human-nature recovery loop

One hundred and seventy-three.

That number, 173, is etched into my mind, my memory, my very being. One hundred and seventy-three is the number of people who died in the Victorian Black Saturday fires of February 2009. The scale of that human tragedy shaped our response: our personal response in our own lives, families and communities; and our response as ecologists, cradling an urgency to get out on the fireground and support affected biodiversity. In my own case, I gently wrapped up my own trauma, and put it very firmly in a quiet hidden space in the back of my head. I needed to focus on urgent recovery actions for two species of threatened fish: the Macquarie perch (*Macquaria australasica*) and the barred galaxias (*Galaxias fuscus*). Over the next few weeks, we collected 'insurance' populations of fish from battered streams about to be deluged with sediment sludge. Over the next 2 years we cared for those fish in our chilled aquaria, and checked on the slow recovery of their habitat, every month.

At the same time, because of the massive human impacts, we also worked very closely with the small communities who lived alongside these fishes. We connected them with the story of the little fish, patiently living in Melbourne while their streams recovered. We nurtured connections between local kids, Traditional Owners, Landcare champions, fish ecologists and artists. We created the opportunity for people to design a local interpretive bridge about the fish story. Kindergarten kids wrote a song about the fish. The arts group created a fishy parade and an ephemeral art installation in the river. Anglers planted trees to help the habitat along. Farmers helped find eggs to identify spawning habitats. We deliberately applied the principles of working with trauma-affected communities, generating a sense of calm, safety, hope, connectedness, and agency/control.

When the little fish were finally returned to their home streams, it coincided with many people returning to their newly rebuilt homes. The synergy of this shared story of return was powerful. It was a hugely celebratory moment, which cemented these recovery stories together. That connection drove a powerful recovery loop, in which people

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advocated for the fish, supported fish recovery, witnessed fish recovery, gained hope, connectedness and a sense of agency, and experienced recovery in themselves.

We saw the power in this nature–human recovery loop. And we recognised it would probably be a very useful thing, in the future. Especially in a future littered with more extreme events.

And, indeed, here we are again. The 2019–20 fires were another massive event in Australian history, with all kinds of associated traumas. Keenly mindful of the lessons of 2009, we argued that biodiversity recovery actions should be delivered alongside, or integrated with, an active nature-led community recovery program. Connect people with local nature recovery, and it will support their own personal and community recovery. The program was launched, but was then almost immediately overwhelmed by the restrictions of the COVID-19 pandemic. The restrictions hampered our ability to meet with fire-affected communities, apply the psychological principles of trauma-sensitive engagement, or share the stories of nature recovery.

Unsurprisingly, perhaps, the cycle happened anyway. Of course, many people already, inherently, intuitively, know these things about nature. Belatedly, now lockdowns are over, we are meeting local people and exploring streams, forests and wetlands across Victoria's North East and East Gippsland. The people we wander with are thrilled at the orchids coming up, delighted at the frogs and fish thriving in the wetlands, and in awe at the return of certain birds. They are painting the greening mountain beyond their doorstep, teaching each other new wildflowers, and hauling out willows along the river. They are monitoring their new nest boxes, photographing epicormic shoots, and loading data into citizen science apps. We are nourishing, amplifying and supporting their efforts. We are joining up local and agency-based experts, nudging emerging citizen scientists, and providing small grants to nurture local, place-based, community-led actions, which make a genuine difference for nature. We are also paying more attention to evaluation, with a dedicated analysis of the impact of such actions, to inform our future practice. But before we begin any formal analysis, we are confident this approach is powerful, important and meaningful. As the primary-school-aged kids from the 'Sarsfield Snaps' post-fire photography project (Fig. 34.6) said: 'If this happens to you, go and watch nature. You'll be OK'.

Bruce Pascoe

Bruce is a Yuin, Bunurong and Tasmanian Aboriginal man.

Spades and shovels

I could hear it coming up the hill. A dull roar like a truck on a bridge. I was alone and so I headed back to the ute and put all the fire kit in the tray. I looked back at the trees where I had been fighting spot fires. See you tomorrow, I told them. Because I knew I would.

I got back to the house and began dampening down as the fire continued to march up to the ridge. During the night it crept down into the paddocks, just fast enough to make you check the window every half-hour and to make sure that you had your car keys in your pocket. You had slept in your clothes for over a month. Hypervigilance. I saw fire from one window or another for 5 weeks. It wouldn't go away, like jackals stalking a zebra. Turn away and it's on you again. My nostrils have the smell of smoke as a default. Everything smells burnt.

But it was stopped short of the house on three occasions and I was able to go back to the ridge and see my trees. Large trees and, as I'd predicted, there they were, scorched half-way up the trunks but the crowns untouched. The rest of the forest, honestly, looked like a

Fig. 34.6. The 'Sarsfield Snaps' post-fire photography project group at Sarsfield Snaps exhibition launch at Melbourne Zoo. (Photo: Bob Carter)

bomb had gone off. Shattered branches, crowns obliterated, every small twig gone. But the big trees, still standing, still a haven for the birds that remained.

Too big to burn. Old trees. Saved from the timber industry because the iron barks weren't straight enough and the angophoras were perceived as useless timber. Our lesson is size. Old, old trees, the first limb so high off the ground that even catastrophic fires hadn't reached more than half-way up their trunks.

The bomb of gas-laden air that exploded on Mallacoota, taking over 140 houses, smashed everything, but here on the farm a month later a tree could survive fire simply by its size and the naturally dynamic distance from those around it. A sparse, massive forest as the old people had designed it. (A postscript on the Mallacoota fire: 40 families are still without a house 2 years later because they were renters, not owners, and capital only rewards the capitalist. Working families take pot luck.)

The design of that old forest had been regulated, legislated in fact, by people using cool fire as a tool. Those people wore no shoes. The rule was if you can't walk backwards and forwards through the fire it is too hot. My son and I learnt to light fires like that and were able to say hullo to parrots and possums as they passed us in leisurely fashion into the unburnt section. It was civilised; civil and civilised.

Most of my family are in the Country Fire Authority, but when we fight fires we dress as if to go to war. We are at war, at war with the land. The boots, helmets and heavy coats and trousers are designed to save our lives because we have designed a forest that has the potential to kill us.

When we knew the baleful fires of 2019–20 were about to descend on us, I counted the trees on several acres of land on the border of New South Wales and Victoria. Three

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hundred and thirty trees to the acre. A monoculture of same-sized silvertop ash destined for the chip mill. After seeing my daughter and family safely on the road to Canberra on New Year's day I came back along the highway, part of which was still burning where flaming trees had dropped across it. I looked for the trees I had counted and they were gone but for piles of 'snow' where they had been. The field of ash resembled Switzerland. But nobody was yodelling.

Colonialism insists that you have to decree that the invaded are not part of God's imagination. They have no culture, they have no economy, they left no mark on the earth. Therefore, it belongs to the invader. Sim sala bim, QED, all squared.

But they did leave a mark. They created a forest of huge, sparse trees, food crops beneath them and almost impossible to burn. Unless the Fat Controller gets a contract to supply timber to the world: cedar for the gentleman's sanctum, ironbark for the railways, stringybark for the soldiers' garrison.

Suddenly, and it was quite sudden, no more forest and because no barefoot fire fighters patrolled the country all the regrowth of wattle, gum, burgan and hop bush came back unimpeded because the designer was imprisoned by the missionary and their method impugned by the priest, pastoralist and politician. We allowed the bomb components to gather around us and when they burnt we blamed the country: poor old, patient, Mother Earth – we never blamed ourselves. We cursed the country and its snakes and spiders and sharks because it was not Shropshire. We lauded the writers who wrote of her terror.

She's not terrible, our country, our mother, she's just missing the care bestowed on her for 100 000 years. Argue amongst yourselves whether it's 65 000 years or 120 000 because I don't have the time or inclination and if, in a decade, white, and therefore acceptable, science reveals that, in fact it is 120 000 years, then you owe me a cup of tea. AND a biscuit.

Save yourself, cuddle your tea caddy close to your chest, because some archaeologists are already saying 120 000 years and all of them are young, except Jim Bowler, but he was always an iconoclast! And an excellent scientist. But Australia, will you pillory the science of the scientists: the young woman in Perth, the young men in Brisbane, the prime-of-life lady in Melbourne when they bring you this science or will you gargle bleach instead?

You may have noticed that I descended into sarcasm for a moment – forgive me, for I am old and sad and deeply offended by the careless and heartless attitude to our mother and the ignorance of Australian history beyond a rack of royal teaspoons and a Panama hat attendance at the Boxing Day Test.

Spades and shovels, Australia – it is time we started talking about what is really what and the words we use to describe it. It was our system that created that fire and then decided that not all would have their houses replaced, just the rich. Even the hard-working families who had just enough to buy a house and then insure it are still richer than those who remain without.

It might seem that the politics of financial security and forest design have nothing in common but both are about care, care of earth, care of people. If that is seen as mawkish heart on the sleeve pixieness, then I think our values have blinded us to decency.

Our values need reformation and if, in a rare moment of generosity towards the original forest designers, we deign to contemplate the Aboriginal economy and conservatism, let us do so without an excess of New Agey guilt and apology but instead the rock-solid foundation of common sense: care for our home. We have security cameras on our gated residences, so why not the same for our foreheads so that we are forced to bear witness to poor farming practice and misuse of water, both designed to favour those who need no favour.

If the flighty environmentalists can remove their gaze from the organic potatoes of the weekend market for long enough, they might realise that their most likely coalition partner is the farmer. Not the Akubra and rugby jersey-type nationalist, but the one who looks out over the land and worries how it will be for their children. How do we grow food in such a way that I hand the soil on in good condition to my children?

Plenty of those modest paddock thinkers are telling me that when they got so broke they had nothing left but debt, they divorced Coles and Woolies, and separated from the farm chemical companies. Result: reduced income but first profit in 30 years.

We don't need to abandon the market, just add back in the commonsense ingredients that make it sustainable and equitable. Of course, the incredibly wealthy will don a miner's helmet and tell us we can't afford change. Well, we can – we just can't afford them. They will tell us that if you remove incentive you end up with a lethargic Soviet tractor factory; but what if we just removed greed and corruption?

I am confident that the world is capable of this kind of contemplation, but we need a truly free press and a parliament where the first woman to declare that her first political motivation was kindness and justice is not laughed at in the chamber of green leather.

I am confident because of the children I talk to. The logic of their concern is palpable. Their ambition to ensure fairness and care is lambent, inspiring. They are young enough to realise that the people risking the health of the world for the sake of their pocket will be dead before the big death happens, counting their coins but leaving the kids to pay their taxes. It seems to me that the kids are ashamed of us. We could, of course, pull up our socks, but I suspect that the young are expecting us to have our stockings at our ankles while they attempt to clean up our mess.

That's my hope: that the young will turn their back on a generation that changed the dictionary so that indulgence was defined as self-expression, living for today.

When did we lose the most human of wishes, to ensure our children had a future? Swallows still do it but we have lost the ticker for it. It's a shame we don't watch the dignity of animals more closely.

John Woinarski
John is a conservation scientist motivated by the wonder of nature, feelings of despair, and hope.

A fragile hope

The Australian bush is resilient, long inured to adversity. We recognise such hardiness as a defining feature of our country, and indeed have long claimed it as a core of our national character. Much will come back after the fires; a blackened landscape will become green. Life will return from the ashes –or, in many cases, from unburnt patches or from beyond the periphery of burnt areas. Over time, the now silent bush will resound again with a familiar chorus of bird song. Such recovery is an antidote to grief, a future to hope for.

But recovery is a fragile process, and we can all help or subvert it, directly or indirectly. Hope alone is insufficient – we need also to act, else the green will wither and become black again, and nature's return will be transitory and superficial – less beautiful, less productive, less diverse, less resilient than it was before these fires.

There are signs of hope – that the many actions taken after the fires have helped recover nature. Hope comes to us with the return to the wild of fire-injured wildlife, after they have been lovingly and expertly nursed back to health. It comes with making and placing nest boxes in fire-degraded landscapes, remedying in part the losses to fire of resources

vital to some species. Hope and satisfaction come when many years of painstaking research yield life-saving dividends in the aftermath of catastrophe: because we then know what to do to aid recovery. Hope and joy also come when – after dogged searches to seek any survivors of a species feared extinct because of the fires – some live individuals are at last found.

Many individuals, communities and organisations took actions after the 2019–20 fires to seek to heal country, in part because they recognised that we belong to this land and have responsibilities for it. In many cases, they were rewarded as their hopes for recovery have been incrementally realised. Local actions are necessary; they help restore the sense of place we value. But local actions alone are insufficient: there are more pervasive issues that must also be remedied.

At its core, hope is wanting for the future to be better than the present, or at least better than some other possible future. The 2019–20 wildfires provided a forewarning of a possible dystopian future, of our generation bequeathing a tarnished world to our descendants. If we are to avoid that unwanted future, our society needs to learn the lessons from these fires. There is hope that it has, evident in official and community recognition that the way we are managing country is not good enough, and that we need to better respect and apply the management knowledge held by Indigenous Australians. I see hope also in official and community recognition that the root cause of these fires was climate change, and mixed hope (we haven't yet committed to doing enough) that our nation and all nations need to do far more to constrain greenhouse gas emissions; else we will experience an ever-increasing frequency of environmental catastrophes.

Perversely, I see hope also in the magnitude of grief felt by our community to the loss of nature in these fires. Such a response demonstrates explicitly the value we place on our environment, and how much it informs and nestles our sense of place. This is our home. We are part of this country. Hope lies in such acknowledgement, and in recognising that it comes with responsibilities.