Multispecies Grief in the Wake of Megafires

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This essay on multispecies grief is the sixth piece in the Violent Environments series, which explores how violence is enacted through, for, and on environmental spaces, including land, water, and air. Series editors: Kristen Billings, Rebecca Laurent, and Rudy Molinek.

The twenty-first century ushered in "the age of the megafire." Defined as wildfires that burn more than 100,000 acres, megafires were rare occurrences before the early 2000s. Now, with worsening droughts, warmer temperatures, and severe storms fueled by climate change, megafires are increasing around the world.

While accounts and theories of violence tend to focus on human experiences of environmental destruction, the impacts of catastrophic climate events like megafires stretch across species and scales. Megafires, like many of the 2019-20 Australian bushfires, are violent occurrences that not only impact human lives but also significantly affect nonhuman beings, species, ecological communities, and landscapes. Their repercussions are both immediate and incremental, and may linger and compound over time.

Smoke-filled sky in eastern Oregon during the Holiday Farm Fire, where smoke was seen as far as the East Coast. Photo by Nathaniel Otjen, 2020.

As fires grow in frequency and size, the more-than-human dimensions of wildfire violence are becoming painfully obvious. Scientists recently calculated—for the first time—the number of animals who died in the 2019-20 Australian fires, estimating that more than three billion vertebrates perished. Due to habitat and population loss, approximately 113 animal species living

on the continent now face extinction.

While these numerical representations of casualties help to extend awareness of the scale and severity of nonhuman impacts, they tend to erase the uneven experiences of suffering and grief felt by individuals and wider communities. As researchers who share a deep concern for the wellbeing of animals, plants, and other taxa, we believe that it is necessary to examine environmental violence through multispecies lenses.

In the vignettes that follow, we speculate on the worldwide environmental violence of megafires and their affective consequences beyond the human. How might we approach and understand more-than-human experiences of suffering and grief? How does affective awareness beyond the human help us better understand the operations of violence, and how might it shape our responses to the conditions that produce shared catastrophe?

Smoky Afterlives

Ribbons of smoke twisting into the sky often provide the first indication of fire. Smoke signals impending danger and, increasingly, the unfathomable and uncontrollable scale of climate disaster. It accomplishes its own kind of burning as it chokes lungs, stings eyes, and permeates fabric, feather, and fur. It reminds us that we are all tethered, in different and yet consequential ways, to the catastrophes of modernity.

Cattle grazing in a smoky, fire-scorched landscape near Corryong, Victoria, Australia. Photo by Jo-Anne McArthur/We Animals Media, 2020.

A substance that arises in suffocating quantities due to settler activities, smoke too destroys, settles, and displaces. Millions of people in the western U.S. and eastern Australia—those of whom identify as First Nation, settler descendant, and diasporic—are now lamenting the loss of a season as smoke stifles the summer months. In the words of climate activist Theo Whitcomb, "Smoke [has] fixed itself to the fabric of summer." Charged with meaning and affect, wildfire smoke has become a genre of contemporary crisis.

Though rarely considered victims of wildfire smoke, domesticated and free-living animals suffer disproportionately from its effects. At once a hyper-visible spectacle and an invisible and unpredictable agent, smoke is capable of causing irreparable harm to bodies and psyches. It contains dangerous particulate matter, carbon monoxide, and volatile chemicals that can, in the short term, lead to asthma, and in the long term, cause weakened immune systems and respiratory and cardiovascular diseases.

Farmed animals are forced to endure days to months of breathing heavily polluted air in pastures, barns, and trailers. In plants, wildfire smoke destroys chlorophyll and obstructs the intake of carbon dioxide. A recent study found that 20 minutes of smoke exposure reduced photosynthesis by as much as 50 percent—a finding that has consequences for global agriculture and for the vegetal beings already suffering under the duress of climate change.

Smoke compels alternate ways to make sense of the multiscalar and multispecies harms that occur during disaster. Turning to more-than-human affect reorients attention toward the individual and collective impacts wrought by catastrophic fires and raises challenging questions. How might an animal feel after losing a partner or close friend to a fate as gruesome as burning? Alternately, how can different groups of *humans* feel empathy upon witnessing and experiencing the fear of nonhuman beings touched by fire and its smoky afterlives?

Empathizing with Suffering Kangaroos

One of the most common and accessible forms of empathy is that felt for an individual. As the thousands of kangaroos killed, hurt, displaced, and otherwise impacted by the 2019-20 Australian bushfires suggest, addressing "Anthropocene air" requires building entangled and empathetic modes of response.

A burned joey is fed water by a rescuer on Kangaroo Island, which was devastated by the 2019-20 bushfire crisis. Photo by New Matilda, 2020.

Kangaroos and koalas were the most iconic species mentioned in public discourse about the fires. While beliefs about animals' capacities to experience suffering differ according to cultural and philosophical traditions, the outpouring of shock and grief during the 2019-20 bushfires demonstrates that even in a highly industrialized settler-colony like Australia, many humans are capable of affective empathy for (at least some) animals.

Although humans' ability to understand precisely the experiences of a particular kangaroo or koala is limited by our different forms of embodiment and lifeworlds, we are nevertheless able to empathize with elements of their experience. For example, reports of kangaroos—usually a very quiet animal—screaming in the bush during the fires conveys extreme and relatable fear and suffering. We could also empathize with the physiological pain of burned feet.

But knowing how a mother Eastern Grey kangaroo musters the energy to search for a lost joey amid a blackened landscape, or what runs through her mind as to whether this might happen again, which location might be safest, and the finer details of how being displaced feels—lost, terrified, overwhelmed, abandoned—requires more speculative empathy. Our ethological knowledge of Eastern Grey kangaroos as highly social animals who grieve when relatives pass can also inform our understanding of the mother's experience. While we cannot know exactly how she feels, this does not prevent us from acknowledging that she has a complex subjective experience characterized by extreme harm and suffering because her relationships with place, environment, family, and community have been torn apart.

When we recognize that billions of animals had similar experiences of suffering during just one fire season in Australia, combined with the knowledge that the climate crisis is making such extreme weather events more frequent and intense, we can begin to understand how the violence of wildfires crosses species boundaries.

The Cautionary Tale of Endlings

During the 2019-20 bushfires, media coverage predictably focused on the suffering of iconic, familiar animals like kangaroos and koalas. However, for lesser-known species, experiences of suffering are more invisible. Here, ghosts from the past return to haunt contemporary considerations of ecological violence and affect.

A short, grainy, black-and-white video taken in 1935 shows Benjamin, the last remaining thylacine, pacing back and forth in a cage. His steps are quick and hurried. His head swings sharply from side-to-side. Within just 18 months of the video being taken, Benjamin would die—an extinction caused by colonial hunting and land-clearing.

In the final years of his life, Benjamin became a strange creature: a living synecdoche, a part standing in for a whole. As an endling—the last living member of a species—he was at once singular and plural, condensing and conflating a specific, embodied experience with the abstraction of his species.

On the level of the individual, Benjamin helps us consider the challenging question of how ecological grief might feel for an animal. The film's focus on him invites us to engage in a form of "critical anthropomorphism" where our encounter with an animal's experiences and feelings is informed by a range of sources. Watching Benjamin's cries and agitated movement, we might combine ethological knowledge of the species' shyness, tendency to avoid humans, and general muteness except when anxious or excited with our own intuitive and experiential understandings of anxiety, overwhelm, and loneliness. This exercise in bridging encourages us to consider affect beyond the human.

> In this era of ecological crisis, it is imperative that we explore ways of relating differently, that we cultivate empathy and care in relationships long dominated by exploitation and neglect.

Thinking about Benjamin through the lens of the collective helps us to further expand our conceptions of more-than-human grief. Through the compounded effects of megafires and industrial activities, an increasing number of species now face extinction. Extinction is marked by patterns of suffering that stretch beyond individual lifetimes. Rather than being defined by the temporally contained and highly visible death of an endling, extinction has a "dull edge." It is a *process* made up of various iterations and accumulations of violence.

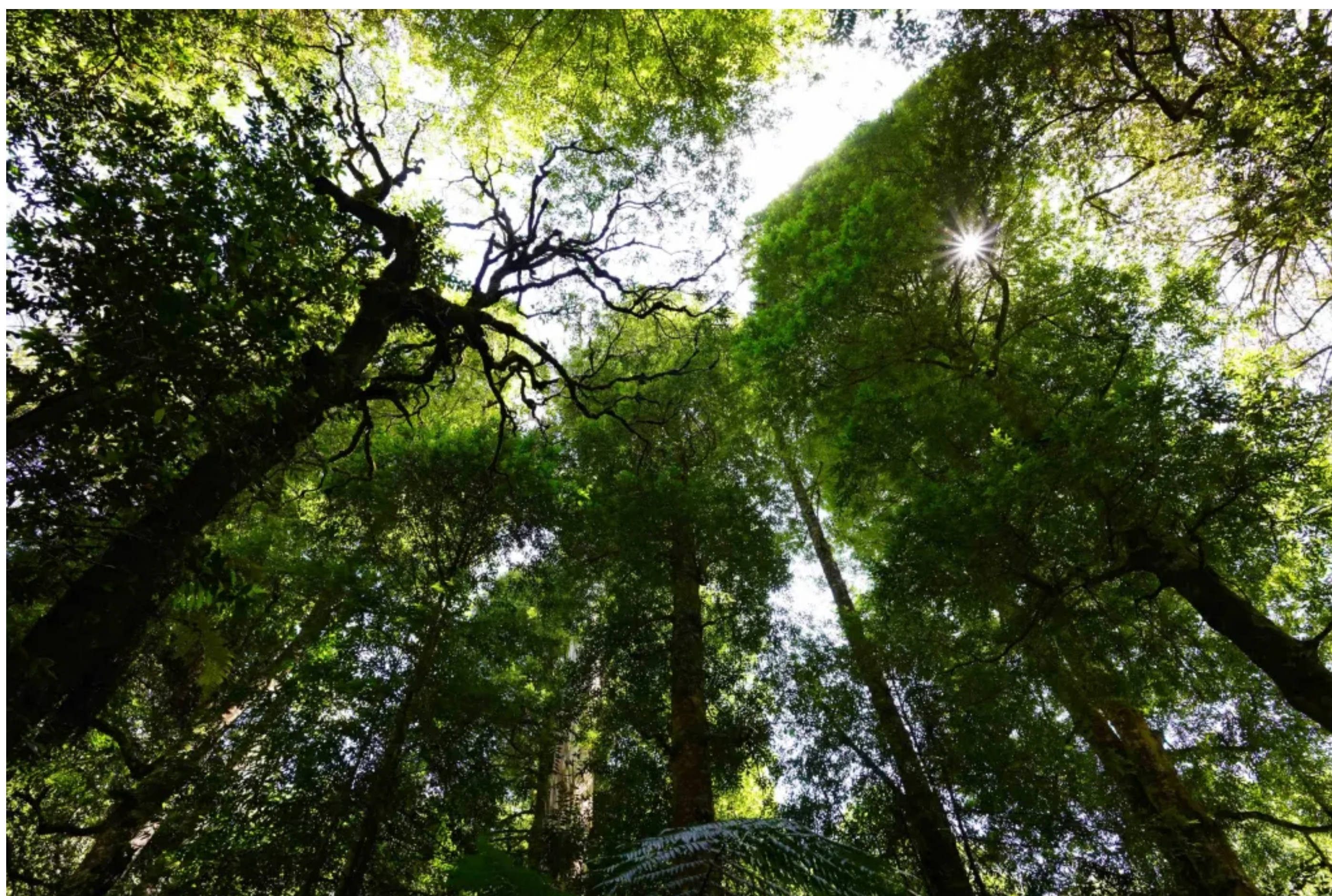
Endlings hold together the individual and the collective. In this, they help us appreciate layers of more-than-human grief by offering opportunities for practicing critical anthropomorphism and better attending to that dull edge—to the shadowy collectives affected "behind the scenes."

Vanishing Worlds

Not only individual animals and species are endlings. Whole ecological communities are also under threat of demise. The largest remaining area of cool temperate rainforest in Victoria and some of Australia's most spectacular old growth and undisturbed catchments hide away in the montane forests of far East Gippsland. Its rainforest canopy is dominated by southern sassafras, black oliveberry, and mountain plum pines. In mixed species communities, majestic mountain grey gums, cut-tails, and the endemic Errinundra shining gums provide homes for animals, such as powerful owls and their owlets who nest in hollows which take up to 500 years to form. With links to the Gondwanan forests, the Errinundra Plateau preserves some of the most ancient and diverse

ecosystems in Australia and provides a refuge for wildlife in a rapidly changing world.

In combination with recurring and intensifying bushfires, these fire-sensitive ecological communities are in peril. Darejo—a majestic Errinundra shining gum with a circumference of 47.2 feet, named using the initials of those who first "encountered" him—is among the biggest trees in Victoria, and one of the few of his kind left. He and his companions were scheduled for logging until forest-blockading activities succeeded in the establishment of Errinundra National Park in 1988. However, the area remains targeted by the logging industry. Clearcutting operations have slowly eaten away large areas of forest surrounding the park. Enmeshed in a multispecies experience of loss, local activists are lamenting their decline.



Rainforest canopy at the Errinundra Plateau, East Gippsland, Victoria, Australia. Photo and research fieldnotes by Lena M. Schlegel, 2023.

This predicament confronts us with a need to reevaluate our role in the death, and the flourishing, of these worlds. We venture that there is an importance to witnessing and mourning those who have been lost—reflections that may resurrect our own relational responsibility. Such responsibility may also demand resistance against the very practices at the core of our predicament. While Australian rainforests have slowly evolved into more fire-tolerant vegetation as the continent has drifted and dried up over millennia, extractive land-use practices and large forest fires fueled by climate change are disproportionately accelerating and compounding this change. If we consider these practices more specifically as acts of violence, we must come to terms with our responsibility toward these ecological communities and the individuals they sustain—like

Darejo, or the family of powerful owls—to ensure they can continue to “shimmer” amid “worlds of peril.”

Responsibility and Mourning

There has long been a call to shift attention away from the spectacle of violent events and onto the systems, behaviors, and relationships that enable them to continue unabated. Thinking and living with rainforests, thylacines, kangaroos, and smoke helps us recognize megafires as relational processes rather than distinct events.

How might an animal feel after losing a partner or close friend to a fate as gruesome as burning?

These vignettes of multispecies grief emerge from and are connected by a deep history of ecological violence fueled by settler-colonial logics and actions. The experiences of nonhumans in the wake of fires suggest that we need forms of communal, multispecies grieving that account for this historical and ongoing suffering. Multispecies grieving can be located in practices like obituaries written for the Great Barrier Reef, in funerals held for melted glaciers, and in memorials for animals killed along roads. Indeed, people should be wary of the consequences of ignoring or denying multispecies grief—noticing, for example, how this denial manifests in heavily-funded de-extinction projects seeking to resurrect more-than-human ghosts without deeper recognition of the ongoing, systemic threats to life.

Veterinarian Chris Barton uses fresh eucalyptus to entice burned or injured koalas to the ground for medical help in a charred plantation in Mallacoota, Victoria, Australia. Photo by Jo-Anne

McArthur/We Animals Media, 2020.

In Australia, three years have passed since the 2019-20 megafires and the sense of national emergency has subsided. The smoke has long cleared; kangaroo mobs have returned to the once charred and skeletal bushlands; young plants have established a foothold in the cavernous black cathedrals of their forebears; the haunting memory of the thylacine has returned to its quiet place in history. Our collective attention has since been captured by other emergencies—from earthquakes to floods to wars—and the memories of fire join the ceaseless parade of catastrophic events.

Together, we sit at an uncertain and potentially transformative crossroads. In this era of ecological crisis, it is imperative that we explore ways of relating differently, that we cultivate empathy and care in relationships long dominated by exploitation and neglect. Thinking beyond human grief, we are called to find ways to intervene within the violence and suffering inflicted on and experienced by vital, living ecologies.

Featured image: Mother eastern grey kangaroo and joey in a burnt plantation near Mallacoota, Victoria, Australia. Photo by Jo-Anne McArthur/We Animals Media, 2020.

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