



Rigby, K. (2017) 'Deep sustainability: ecopoetics, enjoyment and ecstatic hospitality', in Johns-Putra, A., Parham, J. and Squire, L., eds. *Literature and sustainability: concept, text and culture*. Manchester: Manchester University Press, pp. 52-75.

Official publisher URL: <http://www.manchesteruniversitypress.co.uk/9780719099670/>

The whole volume is available to read via OAPEN at: <http://www.oapen.org/search?identifier=632974>

ResearchSPace

<http://researchspace.bathspa.ac.uk/>

This published version is made available in accordance with publisher policies.

Please cite using the reference above.

This cover sheet may not be removed from the document.

Please scroll down to view the document.

3

Deep sustainability: ecopoetics, enjoyment and ecstatic hospitality

Kate Rigby

Mind the gap!

In 2007 an article appeared in the science journal *Trends in Ecology and Evolution* with the witty title, 'Mind the Sustainability Gap'. The gap in question refers especially to the ecological dimension of the sustainability agenda and concerns the chasm that continues to yawn ever wider between 'what we know needs to be done and what is actually being done' to avert catastrophic climatic and environmental change (Fischer et al. 2007: 621). While the authors acknowledge 'regional-scale improvements in some indicators of poverty, food supplies and the environment', they argue that these are 'overshadowed by ongoing deterioration of key biophysical indicators at the global scale', especially with regard to biodiversity loss and global warming (Fischer et al. 2007: 621). In view of the evident failure of existing approaches to sustainability to redress such dire threats to more-than-human life on Earth, Fischer et al. recommend a redirection of sustainability research, policy and management along two main axes. Firstly, in place of the conventional 'triple bottom line' of environmental, social and economic sustainability, they favour a 'hierarchical' model, with the 'biophysical limits of Earth setting the ultimate boundaries within which social and economic goals must be achieved' (Fischer et al. 2007: 621) Secondly, they argue that closing the sustainability gap necessitates bridging the disciplinary divide:

Human action in the world emerges from a complex dialectic among the living world itself, the social contexts of human life and action, and the conceptualisations through which human life is made meaningful. Fundamentally enhanced collaboration among natural and social scientists and scholars of human contexts, symbols and meanings would signal the beginning of a new paradigm for addressing the sustainability gap. (Fischer et al. 2007: 623)

In this chapter, I argue that the twofold renovation of the concept of sustainability proposed by Fischer et al. invites a deeper questioning of prevailing cultural assumptions, perceptions and values regarding human

identity, aspirations and interrelations with nonhuman others and our earthly environs, and I explore the potential contribution of literature to this cultural work of 'deep sustainability'.

The 'transdisciplinary' research programme advocated by Fischer et al. is modelled by the article itself, which arose from a multi-perspectival workshop on sustainability hosted by the Australian National University's Fenner School of Environment and Society. Its seventeen co-authors include physicists and ecologists, geographers and engineers, agricultural scientists and conservation biologists, along with the co-founders of Australia's National Working Group in the Ecological Humanities, which had been inaugurated at the Australian National University in 2001: historian of science and environment, Libby Robin, and anthropologist and cultural theorist, Deborah Bird Rose. Among the other workshop participants thanked in the acknowledgements was the eminent feminist ecophilosopher, Val Plumwood, and it is from her paper, 'Deep Sustainability as Cultural Work,' that this chapter takes its title. Following Plumwood's death in 2008, an article partially based on that paper was published in the Ecological Humanities Corner of the *Australian Humanities Review*, under the revised title 'Nature in the Active Voice.' Here, Plumwood differentiated her depth model of sustainability from conventional constructions of both 'deep ecology', with its prioritisation of 'wilderness' preservation, and 'shallow ecology', with its privileging of exclusively human interests. Instead, she proposed a 'mixed framework' that reveals how 'human-centredness can have severe costs for humans as well as non-humans' (2009: 116). Rejecting the 'pernicious false-choice' of the deep/shallow divide, Plumwood argues that human-centredness – 'a complex syndrome which includes the hyperseparation of humans as a special species and the reduction of non-humans to their usefulness to humans, or instrumentalism' – engenders a hazardous 'failure to understand our embeddedness in and dependency on nature [and] distorts our perceptions and enframings in ways that make us insensitive to limits, dependencies and interconnections of a non-human kind' (2009: 116). Accordingly, in her earlier paper, she had argued that the 'cultural work of deep sustainability' entailed the critical investigation of conceptual frameworks and social systems that occlude the agency and interests of nonhuman others, along with the 'ecological services,' upon which human social and economic sustainability remain dependent. In 'Nature in the Active Voice,' she goes on to suggest how certain forms of writing can help to loosen modern cultures out of the bonds of human self-enclosure by providing a space for what she calls an 'animating sensibility and vocabulary' (Plumwood 2009: 126) that recognises other-than-human creative agencies, communicative capacities and ethical considerability. This she had previously hailed as a 'critical green writing project' that 'might make visible whole new interspecies dialogues, dramas and projects,' and thereby 'dispel the sado-dispassionate

“imaginary” ... that has supported and nourished the post-enlightenment illusion of human monopoly of mindful, cultural, intentional elements in the world’ (Plumwood 2007: 19).¹

In her workshop paper, Plumwood explicated ‘sustaining’ in line with earlier ecological feminist articulations of an ethics of flourishing (e.g. Cuomo 1998), namely as referring to activities that ‘nourish’ or ‘support’, thereby ‘contributing to the other’s resilience and flourishing’ (Plumwood 2006: 1). Following this definition, an apt emblem for sustainability might be found in the figure of the nest: an avian work of eco-poetics, understood literally as the making of an *oikos*, a place and a practice for bringing new life into being, which, in its interwoven threads of diverse materials, reiterates the connective processes that compose flourishing ecosystems. In the latter part of this chapter, I will return to the nest, specifically as it figures in the work of the Romantic poet John Clare and is refigured in the eco-poetic experimentation of the contemporary writer (and erstwhile conservation biologist) David Morley.

The interpretive frame that I bring to this discussion is informed by several further lines of theorisation which enrich Plumwood’s proposal for a ‘radical green writing project’: ecophilosopher Freya Mathews’s transpecies ethic of ‘bioproportionality’ (2014), which I relate to Derrida and Dufourmantelle’s notion of ‘radical hospitality’ (2000), and Mathews’s ‘ontopoetic’ model of the transvaluation of desire (2010), which I connect with recent work on ‘alternative hedonism’ by Kate Soper and others (Soper et al. 2009). While the trajectories of radical hospitality and alternative hedonism are seemingly divergent, with the former presupposing an altruistic ethic of alterity as opposed to the self-pleasuring implicit in the latter, I argue that both are necessary to advancing the work of deep sustainability and can be shown to bear upon one another in the eco-poetic practices that I discuss here. Firstly, though, it is necessary to consider more closely the limitations of conventional understandings of sustainability, in order to explain why, and how, these shortcomings need to be redressed.

Reframing sustainability: beyond the ‘triple bottom line’

As previously indicated, one of the two major problems with prevailing models of sustainability research, policy and management identified by Fischer et al. arises from the construction of sustainability as consisting of three ‘pillars’. This metaphor features influentially in the UN General Assembly’s resolution endorsing the outcome of the 2005 summit on sustainable development, which included the commitment to promoting ‘the integration of the three components of sustainable development – economic development, social development and environmental protection – as

interdependent and mutually reinforcing pillars' (2005: 11–12). While 'pillars' invokes an architectural image in which the removal of any one support structure would cause the ceiling to collapse, another way of imaging sustainability along these lines is the Venn diagram, in which the three dimensions are seen to be distinct, but overlapping at a central point. This has given rise to the popular concept of the 'triple bottom line', which implies, firstly, that these are discrete concerns, and secondly, that there is a parity between them. In much corporate and governmental practice, this has enabled economic considerations to take precedence, often primarily in the interests of a privileged minority, moreover, with matters of social development and environmental protection being addressed with more or less token measures, if at all. In many cases, then, the semantically slippery rhetoric of sustainability is deployed with a view to maintaining capitalist business-as-usual in 'developed' nations, while extending it to 'developing' ones. It is for this reason, then, that Fischer et al. call for the reconceptualisation of the three components as a hierarchy of considerations, based on the recognition that '[s]ocieties cannot exist without a functioning life-support system, and economics can only flourish within a functioning social system with effective institutions and governance structures' (2007: 622). In other words, there is only one bottom line, and it is set by those biophysical processes that have engendered, and remain crucial to, the diverse more-than-human life of this planet.

This recommendation echoes some earlier formulations of sustainability (e.g. Eichler 1999) that have since been sidelined, but are now being rearticulated in relation to the UN's proposed new Sustainable Development Goals. In a 2013 Comment in *Science*, for example, the eminent climate scientist, Dave Griggs, in company with a group of other researchers (including Will Steffen, one of the co-authors of Fischer et al. 2007), proposed a revised model of sustainability based on what they termed a 'nested concept' (Griggs et al. 2013: 306). This entails an amendment to the widely accepted definition of the UN's 1987 World Commission on Environment and Development (chaired by Gro Harlem Brundtland), which is verbally modest, but conceptually momentous. Instead of framing sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs', the proposed new definition refers to 'development that meets the needs of the present while safe-guarding Earth's life-support system, on which the welfare of current and future generations depends' (World Commission 1987: 305).

The spur for this crucial redefinition is the UN policy initiative to frame a new set of Sustainable Development Goals for the period 2016 to 2030 to replace the Millennium Development Goals following their expiry at the end of 2015. Griggs and his colleagues are contributing to

this initiative through the transnational Sustainable Development Solutions Network Leadership Council (2013), which has produced an 'Action Agenda for Sustainable Development' that broadly accords with the 'nested' approach. For example, while economic development and ending extreme poverty remain key priorities, these are now to be achieved in ways that respect 'planetary boundaries' by ensuring environmentally sustainable production and consumption patterns and helping to stabilise the human population globally by mid-century. Improvements to agricultural systems, rural prosperity and urban quality of life are also to be keyed to enhanced environmental sustainability, which is now understood to include not only the protection of biodiversity and improved management of water and other natural resources, but also concerted climate change mitigation by means of arresting and reversing deforestation, along with a rapid shift to clean energy production 'for all'.

In the model presented in *Science*, Griggs and his colleagues synthesise the ten 'priority challenges' identified in the 'Action Agenda' into six over-arching goals – Thriving Lives and Livelihoods; Sustainable Food Security; Sustainable Water Security; Universal Clean Energy; Healthy and Productive Ecosystems; and Governance for Sustainable Societies – each of which cuts across the nested economic, social and environmental domains. This reframing of sustainability poses profound challenges for 'developed' as well as 'developing' nations, in addition to promising to redress the marginalisation of ecological considerations that has continued largely unabated, despite – perhaps even under the cover of – the proliferation of the rhetoric of sustainability. In the encompassing outer circle of Griggs's model, humans and nonhumans alike find themselves in the same 'nest', one that is at once constitutive of, and constituted by, the Earth's biosphere. The precise coordinates of this meta-nest are provided by the nine 'planetary boundaries' identified by Johan Rockström and colleagues at the Stockholm Resilience Centre, which define limits to climate change, biodiversity loss, changes to the nitrogen and phosphorus cycles, ozone depletion, ocean acidification, freshwater use, changes to land use (especially the conversion of wildlife habitat to agricultural or industrial purposes), chemical pollution, and atmospheric aerosol loading. Forms of economic and social development that transgress these boundaries, Griggs et al. warn, are liable to cause 'widespread, abrupt and possibly irreversible changes to basic Earth-system processes' (2013: 306).

At this point, however, a further possible pitfall of the sustainability agenda comes into view: namely that identified by Steve Mentz as a 'fantasy about stasis' (2012: 586). While Mentz's suspicion might hold true of some popular visions of sustainability, I do not believe that this is implicit in the notion of planetary boundaries, which presupposes the dynamism of biophysical systems whilst seeking to conserve the conditions under

which the ‘discordant harmonies’ (Botkin 1990) discerned by post-equilibrium ecological science might continue to resound on Earth, in new variations and in new keys, into the future. What is to be sustained, on this understanding, is not a stable set of entities and relations, then, but the potential for ongoing or, in sites of pre-existing degradation and diminishment, renewed more-than-human flourishing. This in itself nonetheless implies a transformation of business-as-usual, not only for environmentally harmful industries, but also for prevailing environmental practice. For, in light of the new ecology, and in the grip of global warming, biodiversity conservation and ecological restoration can no longer consist in the endeavour to maintain species within, or return them to, their pre-existing geographical bounds: rather, both entail facilitating species’ migration or hybridisation (Becker et al. 2013), as free-living plants and animals seek to forge their own pathways of survival into an uncertain future. Under today’s intensifying conditions of heightened ‘landscape fluidity’, new models of environmental sustainability are needed, such as the seemingly oxymoronic notion of ‘anticipatory restoration’, as proposed by Adrian Manning and his colleagues (several of whom also co-authored ‘Mind the Sustainability Gap’) in their guest editorial to a 2008 issue of the *Journal of Biogeography*. This involves restoring the ‘*properties* of past functional ecosystems without attempting to create unattainable facsimiles of the past’, not only in ‘re-wilded’ zones, moreover, but also in mixed or ‘cultural’ landscapes, so long as, in these places, sustainable forms of ‘commodity production’ can conceivably co-exist with flourishing populations of free-living biota (Manning et al. 2008: 195). A further conceptual shift is required here too: for while modelling of climate change impacts continues to improve, we also need to get better at anticipating the unforeseeable. Recognising this element of incalculability necessitates the development of improvisational forms of ‘adaptive governance’ (Brunner and Lynch, 2010), as we seek to act responsibly under conditions of uncertainty. As I have argued elsewhere, this entails in turn honing our skills of creatively and compassionately ‘dancing with disaster’ (Rigby 2009, 2015b) in the face of the increasing frequency and intensity of weather-borne extreme events.

There is, nonetheless, a further flaw with conventional constructions of sustainability: one that is more fundamental than the ‘fantasy of stasis’ targeted by Mentz, and has evidently been carried over into the nested model of sustainable development. Here, as Stacy Alaimo has observed of the original Brundtland definition, ‘[n]ot only are the “generations” usually taken to be human, but the lively world is reduced to material for meeting their “needs”’ (2012: 562). This unreflected anthropocentrism is indicative of the second problem identified by Fischer et al.: namely, a failure to ‘reflect on foundational issues’ and to ‘confront potentially uncomfortable ethical questions’ (2007: 623). It is in order to redress this

shortcoming that they strongly advocate enhanced collaboration between natural and social scientists and humanities scholars, with a view to more effectively linking 'short-term policy actions with agreed longer-term sustainability targets' on the basis of 'critical analysis of foundational and longer-term issues (e.g. values, beliefs and motivations)' (Fischer et al. 2007: 623). This point is elaborated further in a co-authored Perspective piece in *Nature Climate Change* that desiderates the marginalisation of the environmental social sciences and humanities from current discussions of the 'human dimensions' of global climatic and environmental change (Castree et al. 2014). Conducted almost exclusively by natural and quantitative social scientists, existing research in this area 'offers little or no sense of humans as diverse, interpretive creatures who frequently disagree about values, means and ends; and there is no mention of power, violence, inequality and the perennial desire of some people to replace one socio-environmental regime with another' (Castree et al. 2014: 765). Occluding cultural, philosophical and socio-political differences in perspective, the sustainability agenda universalises a historically specific view of other-than-human 'nature' as a store-house of resources and provider of services for Earth's sovereign species. While this view might have counterparts in some non-Western civilisations, it enters the discourse of sustainability from a distinctively modern Western line of thinking. As decades of research in the environmental humanities have clearly demonstrated, this can be traced back to certain Greco-Roman and biblical notions of human exceptionalism, but became consolidated in that project of human mastery first formulated as such in the context of the scientific revolution (a project in which anthropocentrism was historically correlated also with androcentrism, as Theodor Adorno and Max Horkheimer noted in their *Dialectic of Enlightenment* of 1944 (1979: 3), and has since been examined in more depth and detail by ecofeminist scholars such as Carolyn Merchant (1980) and Val Plumwood (1993)). In order to move from 'paradigms of conquest to paradigms of connectivity', as Fischer et al. propose (2007: 623), or, in Plumwood's formulation of this shift, to disavow the Cartesian quest to extend the 'empire of man over mere things' in favour of negotiating 'life membership in an ecological community of kindred beings' (2009: 119, 121), a more thoroughgoing reconceptualisation of sustainability is required: one in which the current and future generations, whose needs are to be met, are understood to be more-than-human.

As already noted, consideration of more-than-human flourishing is given a higher priority in the nested model of sustainability to the extent that biodiversity loss constitutes one of the planetary boundaries that must not be transgressed (along with climate change, which is set to compound existing pressures on wildlife habitat and dramatically escalate the extinction rate). However, in the absence of an explicit affirmation of ethical regard for other-than-human beings in their own right, the tacit

assumption here is that biodiversity loss should be limited primarily in order to protect human interests in the medium to long term. Some conservation biologists might well be among those who see the protection of biodiversity (including genetic diversity within species) as an end in itself, considering that while extinction is intrinsic to evolution, it is fundamentally unethical for one species, which is possessed of the cognitive capacity and moral discernment to do otherwise, to be condemning so many others to oblivion at the current calamitous rate. But in societies that remain highly ‘anthroparchal’ – characterised, that is, by systematic forms of human domination, exploitation and marginalisation of nonhuman others (Cudworth 2005: 63–70) – it is rather unsurprising that the value of biodiversity should commonly be framed primarily in terms of its human benefits. Yet, as Freya Mathews (2013 and 2016) has demonstrated, the anthropocentric case for biodiversity conservation is not only ethically questionable; it is also ultimately unconvincing.

Two of the most frequently cited grounds for biodiversity conservation are particularly flimsy. Firstly, the idea that we should save other species (generally of the charismatic kind) so that our grandchildren can have contact with them is readily countered by the argument that since people only miss what they have known, future generations are unlikely to care much about species that had disappeared before they were born, especially as they are likely to live on as simulacra (which is the only way that most children have contact with them today anyway, give or take the occasional zoo visit). Secondly, the claim that people need contact with nonhuman others and more-than-human places for their psychophysical health provides reasonable grounds for pet ownership, farm visits, country rambles, bush walks and the provision of urban parks and gardens; but it does nothing for the protection of free-living species in far-flung locations, where little human contact is feasible, or probably even desirable, on a regular basis. A far sturdier anthropocentric case for biodiversity protection can be made on the basis of its role in the provision of ‘ecosystem services,’ and it is in these terms that it is framed in the draft Sustainable Development Goals. Yet, as Mathews observes, future technological advances in biomimicry, such as are already underway in the development of robotic pollinators to compensate for the decline in honeybee populations, hold out the possibility that our fledgling high-tech civilisation could plausibly fly the biospheric nest in which it hatched, enabling future generations of humans to get along just fine with a radically reduced suite of other species, retained either for their ornamental, companionate or instrumental value.²

A further weakness in the anthropocentric ethic underpinning conventional framings of biodiversity conservation that Mathews identifies is that it only triggers intervention at the point of endangerment, thereby tending towards an ‘ecology of last things’ (see Joshua Schuster’s essay in

this collection). This is actually an oxymoron, as flourishing ecosystems rely not only on dynamic interrelations among different species, but also on the relative abundance of each species (with far fewer top predators, for example, constituting a viable population by comparison with herbivores and invertebrates). Importantly, population size is also a key factor in maintaining genetic diversity, and hence the capacity of species to adapt to changing conditions. Mathews therefore proposes instead an ethic of 'bio-proportionality', grounded upon a generalised respect for living things in themselves, rather than simply as service providers for humans. The express goal of bio-proportionality is the optimisation of populations of all members of those multi-species collectives (frequently including humans) whose dynamic interrelations engender ecosystemic flourishing.

In the era of the Anthropocene, on a planet increasingly given over to servicing exclusively human domiciles (however inequitably), the principle of bio-proportionality enjoins an ethic of bio-inclusive hospitality: the imperative, that is, to make space on 'our' Earth for the domiciling of 'otherkind' (an ecotheological coinage that felicitously conjoins recognition of alterity and kinship in 'humankind's' relations with other creatures).³ Bio-proportional hospitality falls short of Jacques Derrida's definition of the radical categorical imperative of hospitality. This enjoins an unconditional welcome to any and every 'arrivant': 'whoever or whatever turns up', that is, 'whether or not the new arrival is the citizen of another country, a human, animal, or divine creature, a living or dead thing, male or female' (Derrida and Dufourmantelle 2000: 75, 77), prior to any identification, without any expectation of reciprocity, and beyond any possible calculation of collective wellbeing. In practice, however, hospitality towards the 'arrivant' is inevitably always qualified by one's other duties of care, as Derrida reminds us with the tale of the biblical patriarch, Lot, himself a non-native inhabitant of Sodom, who offered up his own virgin daughters in place of his angelic guests to the Sodomites who wished to 'penetrate' them. An ecopolitical analogue of this might be the actions of those legislatures that have sought to protect wildlife habitat, questionably construed as 'wilderness', at the cost of expelling indigenous peoples. By contrast, Mathews's bio-proportionality ethic envisages multi-species collectives, in which humans might well play a critical role in 'caring for country', to use an Aboriginal English expression, as is already the case across large swathes of central and northern Australia, where Native Title holders, drawing on their traditional ecological knowledge and skills in conjunction with a selective use of contemporary science and technology, are engaged in vital conservation and (increasingly, anticipatory) restoration efforts (Altman and Kerins 2012).⁴

Mathews also foresees a vital place for those techno-scientific advances (for instance, in nutrition, housing, water use and energy production) that could help to relieve the human pressure on the biosphere as we

transition to a new, 'ecological civilisation'.⁵ In addition to constraining human population growth and consumption levels through democratically-instituted forms of sustainable development that promote social equity and inclusion within the framework of a bio-inclusive ethic of more-than-human flourishing, bio-proportional hospitality would mandate the opening up of migration corridors for species unhoused by climate change, as well as making provision for otherkind in the face of increasingly frequent and intense extremes. Such practices instantiate what I have elsewhere termed 'ecstatic hospitality' (Rigby 2008), modelled biblically in the figure of Noah's Ark, in which refuge is offered by a host whose own home too is unmoored and liable to be lost.

To frame bio-proportionality in terms of hospitality is to wager on altruism. Personally, I think highly enough of human potential (despite ample contrary evidence) to consider this wager worthwhile. But I am also enough of a realist (and, for that matter, an epicurean) to share the view of Kate Soper and her colleagues that, at least among the more pampered citizens of the 'developed' world, the pleasure principle is likely to provide a more powerful motivation for the kind of socio-ecological transformation entailed in the bio-inclusive practice of sustainability. To incline people towards 'deep sustainability', though, might require a 'deeper' kind of pleasure than those forms of 'alternative hedonism' identified thus far under this rubric, such as 'slow food', self-provisioning, cycling and sensual immersion in 'wild' places (Soper et al. 2009). In Mathews's analysis, it necessitates nothing less than the 'transvaluation of desires' (2010: 3), entailing a fundamental re-orientation towards materiality *per se*.

Within the limits of this chapter, it is not possible to expand upon the onto-epistemological underpinnings of this proposed re-orientation, as explicated by Mathews in her monograph *For Love of Matter* (2003) and explored further in *Reinhabiting Reality* (2005).⁶ Put (far too) simply, though, Mathews's 'contemporary panpsychism', like Plumwood's 'philosophical animism' (2009) and other variants of 'new materialism' (e.g. Coole and Frost 2010), challenges the prevalent view of matter as passive, mute and mindlessly mechanistic that came to prominence with Cartesian dualism and Newtonian atomism. The inadequacy of this view was already becoming apparent to those physicists, such as Werner Heisenberg and Niels Bohr, who began exploring the weird and wonderful world of quantum mechanics in the 1920s, and it is now being challenged more widely by contemporary physicists such as Karen Barad (2007). In the meantime, though, reductive materialism had become rooted in modern Western culture, where it found a neat fit with consumer capitalism. Stripped of creative agency, communicative capacity and ethical considerability, the realm of 'mere matter' becomes available to be mined, manipulated and disposed of in whatever way those humans with the buying power to do so think fit.

In Mathews's analysis, this impoverished view of reality also profoundly impoverishes human existence, no matter how rich in stuff it has made some of us, in that it tends to limit our potential for self-actualisation in and through our intersubjectival relations with others to interactions with fellow humans (interactions that are themselves increasingly semiotically diminished by being reduced to words on a screen), albeit possibly supplemented by animal companions and/or supernatural deities. The reductively materialist metaphysics that haunts modern Western culture in turn feeds the hunger for ever new, ever disposable consumer trinkets precisely because, perceived as 'mere things', valued not even principally for their utility so much as for the social identities they allow their owners to embrace and display, they forever fail to satisfy our deeper longing to participate in an inherently meaningful more-than-human world. While Mathews has presented carefully reasoned arguments for her alternative, monist metaphysics for the benefit of fellow philosophers, her version of the cultural work of deep sustainability is more practical than theoretical. In order to wean ourselves from reductively materialist and socio-ecologically unsustainable forms of commodity fetishism, Mathews recommends the cultivation of practices that afford the deeper pleasures of interactive self-actualisation, or co-becoming, through experiences of intersubjective encounter, communicative interchange and, potentially, synergistic co-creation with more-than-human others and those places in which we might meet with them. Mathews terms such interactions 'ontopoetic' (2009), and in the remainder of this chapter I consider some examples of literary works that are conducive to this onto poetic transvaluation of desire in ways that are also consistent a bio-inclusive practice of hospitality.

Refiguring the nest: the eco poetics of deep sustainability from Clare to Morley

If, as suggested previously, the bird's nest is taken to be both literally and figuratively emblematic of the life-sustaining work of contributing to the other's flourishing, then there is surely no better English-language writer to consider in this connection than John Clare, who penned some one hundred poems dedicated to birds and their nests. Clare, along with several other Romantic writers and philosophers, has attracted a good deal of ecocritical attention following the publication of Jonathan Bate's landmark study of 'romantic ecology' in 1991; and in his later monograph, *The Song of the Earth*, Bate homed in on Clare's nest poems in particular as exemplary of an eco poetics of dwelling. Yet, as Richard Kerridge observes in his discussion of 'Green Pleasures' (2009), Romanticism occupies an ambivalent position in relation to sustainability. In the influential analysis

of Colin Campbell (1987), the Romantic celebration of the human capacity to imagine possibilities that render everyday realities disappointing by comparison nurtured an ethos of inchoate longing that became the cradle of insatiable consumerist desire. Campbell stressed, however, that this constitutes a historical irony, as most Romantics took a more or less explicitly critical view of the growing commercialism of their day: 'Getting and spending we lay waste our powers,' proclaimed Wordsworth in 'The World is Too Much with Us,' as Kerridge recalls (2009: 142). In Kerridge's view, this is an irony that 'might conceivably cut both ways. If Romanticism provides the structure of desire that motivates consumerism, then Romanticism remains powerfully latent in contemporary culture: there to be renewed in non-consumerist forms' and capable, perhaps, of providing a 'bridge between pre-industrial and the post-industrial sensibility' (Kerridge 2009: 146, 147): a possibility explored further by Kate Soper in her discussion of 'avant-garde nostalgia and hedonist renewal' (2011). To this I would add that Romanticism is in any case an inchoate historical phenomenon, such that all summary characterisations, including Campbell's, 'imply a coherence ... that close inspection calls into question' (Day 1996: 5).⁷

Within the highly heterogeneous field of British Romantic literature, Clare definitely did not share the fetish for inchoate longing, preferring instead precisely that mode of close observation of the other-than-human inhabitants of his rural environs in all their material particularity and in a spirit of non-appropriative empathetic attentiveness which Mathews identifies as a critical first step towards the onto-poetic transvaluation of desire (2010: 3–4). Take, for instance, 'The Nightingales Nest,' a poem that cuts its figure against a long-standing literary tradition of putting the nightingale, and above all his (or, as is more often the case in poetry, if not in nature, 'her') nocturnal song, to symbolic purposes. One of the most prevalent poetic uses of the nightingale since classical times is as a figure for the joy and anguish of amorous love, and it is this anthropomorphising trope that Clare initially invokes:

Her wings would tremble in her ecstasy
 And feathers stand on end as 'twere with joy
 And mouth wide open to release her heart
 Of its outsobbing songs. (Clare 2004: 168)

While the charge of anthropomorphism, as Plumwood argues, is all too often deployed as a 'policeman for reductive materialism' (2009: 126), patrolling the boundaries of human–nonhuman hyperseparation, the conventionalised projection of human-referenced attributes onto a non-human other is also problematic if it blocks recognition of alterity and singularity. Clare is evidently mindful of this risk, as he cites the conventional figuration of the nightingale's song precisely in order to depart

from it: firstly, this bird is said to be singing all day, not all night; secondly, the use of the conditional, 'as 'twere', signals a note of uncertainty about what this bird might actually be feeling. In the following lines, moreover, her apparent enjoyment of the 'happiest part / Of summer's fame' is referenced to the poet's own 'happy fancies'. Such culturally conditioned imaginings are counter-posed to the corporeal as well as mental effort entailed in trying to apprehend this particular bird in her own sphere of existence and world of signification: her distinctively avian *Umwelt*, in Jakob von Uexküll's terminology (2010).⁸ In so doing, however, Clare also draws attention to the creatureliness shared by bird and human, even while stressing the necessity of getting out of his or her comfort zone for the would-be birdwatcher, who is depicted '[c]reeping on hands and knees through matted thorn / To find her nest and see her feed her young.' Clare also hints at the conjunction of human–animal similarity and alterity in the preceding line, which foregrounds the appetitive aspect of this quest: 'There have I hunted like a very boy' (2004: 168). This simultaneously links his current practice to, and distinguishes it from, the nest-raiding of 'rude boys' (such as Clare himself had once been) – an activity now perceived as morally dubious, being motivated not by subsistence requirements but by the perhaps distinctively human thrill of non-nutritive collection: one that the nightingale has learned to foil by building her 'secret' nest 'where rude boys never think to look' (Clare 2004: 169).

As an adult, the speaker has evidently discovered where to look; but the desire that propels his search is no longer appropriative, but empathetic, and, in Mathews's terms, incipiently erotic. Eros, in this view, refers to the desire not to lustfully possess the other, but to connect with them in such a way as to respect their alterity, whilst seeking a mutual flourishing. The transition away from the 'brute-striving of appetite' to an 'awakened reaching-out' (Mathews 2003: 150) is signalled in the shift from the speaker's initial injunction to his interlocutor in the opening lines to 'softly rove' and 'Hush!', which serves the ambivalent purpose of enabling them to sneak up on the nightingale, more for their benefit than for hers, to the later exhortation to resist the temptation to 'trample' on the brambles to access her nest, mindful that 'our presence doth retard / Her joys' (Clare 2004: 170). Advancing a bio-inclusive ethic of respect for the dwelling-places of otherkind, the speaker urges his companion (and the poet thereby his readers) to leave 'her home ... as we found it: safety's guard / Of pathless solitudes shall keep it still' (Clare 2004: 170). This shift is prompted by an empathetic attentiveness to the way in which the bird is reading and responding to the human intruders, the cessation of her song, alarm call ('a plaintive note of danger' (Clare 2004: 170)) and anxious movements being legible as signs of fear on the basis of the shared creatureliness that subtends the acknowledged differences between human and avian semiospheres. This call to compassionate self-restraint

is nonetheless followed by a rapturous address to the avian songstress, hailing the ‘melody’ that ‘seems hid in every flower / That blossoms near thy home’, and proceeding to a lingering description of her ‘curious’ and elusive nest (Clare 2004: 170):

no other bird
 Uses such loose materials or weaves
 Its dwelling in such spots – dead oaken leaves
 Are placed without and velvet moss within
 And little scraps of grass and, scant and spare,
 What scarcely seem materials, down and hair. (Clare 2004: 170)

While the poem concludes with a reiteration of the call for restraint in order to protect the bird’s hidden nesting-place with its five ‘curious eggs,’ altruistic concern for the other’s flourishing has now been joined by erotic enjoyment of non-appropriative contact with a kindred being, along with her glorious song and distinctive *Umwelt*.

In his discussion of ‘The Yellowhammer’s Nest,’ Washington remarks that the titular nest is portrayed by Clare as ‘a unique composition, expertly crafted by this individual bird within a particular ecology’ (Washington 2014: 668). Such nests appear as the product of a creative agency that exists on a continuum with that of the poet in weaving his work of words, which in turn bears witness to, and in that sense upholds, the bird’s handiwork. Clare felt that his own literary productivity was actually gifted to him by the multiple agencies of his more-than-human environs, maintaining that he ‘found the poems in the fields’ (cited in Bate 2003: 15). Like Patrick Bresnihan, I do not believe that this should be taken as a mere figure of ‘poetic sentiment.’ Rather, it was indicative of Clare’s recognition that his poetry was materially co-constituted by ‘the force of the world acting on him,’ it arose from his embodied encounters with diverse others in a particular space and time, and as he attended to ‘the way self and world were revealed, or achieved, through ongoing relations’ (Bresnihan 2013: 80).

While Clare indubitably draws on pastoral tropes and traditions in much of his verse, he does not depict the multi-species collectives that nourished his writing as entirely harmonious. As ‘one of the great poets to chronicle the daily lives of animals, their sounds and shapes, their habits and habitats, their wonder and welfare,’ Clare also records not only their ‘sorrows and sufferings at the hands of humans’ (Washington 2014: 665), but also, as in the case of the yellowhammer pair whose nest is raided by a peckish snake, those that arise in the normal course of creaturely existence. The changes that he perceived to be unfolding in association with the enclosure of erstwhile common land, though, exposed other creatures to a whole new regime of human domination, as well as undermining the subsistence needs of the rural poor. Clare’s concern about

this wider threat to the domiciles of free-living animals doubtless informs the anxiety that the speaker betrays in ‘The Nightingale’s Nest’ regarding the invasiveness of his own birdwatching activities. This link is implicit in the affirmation, ‘We will not plunder music of her dower / Nor turn this spot of happiness to thrall’ (Clare 2004: 170), *thrall* being the word used to characterise the relationship of mastery and possession instituted by enclosure in Clare’s protest poem, ‘The Mores’: ‘These paths are stopped – the rude philistine’s thrall / Is laid upon them and destroyed them all’ (2004: 91). It is perhaps also this wider context of socio-ecological change that motivates the move, in the concluding lines of ‘The Nightingale’s Nest’, out of the mode of loving attentiveness to the particular – which, as Clare surely knows, can never be captured in its concrete singularity in any work of words, no matter how skilfully crafted – into a more abstract and generalising register: ‘So here we’ll leave them, still unknown to wrong, / As the old woodland’s legacy of song’ (2004: 171). This ‘legacy’ can be read literally as the perpetuation of birdsong down the avian generations, facilitated by the protection of their nesting-places. But it might also be understood figuratively, with reference to something more like a *genius loci*, such as that embodied by the speaking brook in ‘The Lamentations of Round-Oak Waters.’ As such it refers to a circumambient sentience that ‘still’ inheres in the inter-specific co-becoming of the commons, but that is being silenced by the conversion of this ‘animated, sensible landscape’ (Irvine and Gorji 2013: 123)⁹ into a mere storehouse of ‘natural resources’: land to be rid of ‘pests’, such as the moles ‘hung ... as traitors’, as Clare puts ‘Remembrances’ (2004: 134), and rendered ‘productive’, no longer of vibrant multi-species collectives, but of cash crops and, thereby, taxable income for private land-owners.

As Bresnihan observes (2013: 79), Clare offers a telling image of the new mentality associated with enclosure in one of his earliest poems, ‘A Ramble.’ Here, the speaker’s enchantment with ‘every trifle nature’s bosom wears’ is contrasted with the indifference of the ‘heedless passenger’, who:

Soodles me by, an animated post,
 And ne’er so much as turns his head to look
 But stalks along as though his eyes were blinded
 And as if the witching face of nature
 Held but now a dark unmeaning blank. (Clare 2004: 8)

Read in conjunction with Mathews’s critique of reductive materialism, these lines disclose how the simultaneously de-animating and, as suggested by ‘stalks’, predatory mindset of industrial modernity-in-the-making also devitalises human subjectivity. A world stripped of its inherent meaningfulness, reduced to a passive screen for human projections and a means for human ends, is one in which the self-proclaimed sovereign subject too is psychically diminished. Reduced to an ‘animated post’, she too is liable

to be instrumentalised as part of the support structure for a system in which anyone, as well as anything, can be reduced to what Martin Heidegger in 'The Question Concerning Technology' (1993) aptly termed 'standing reserve' (analogous, that is, to trees defined as timber, left standing only to be felled).

Arrested in his self-actualisation as a psychophysical being in communion with an agentic and communicative more-than-human world, the possessive individual of the new enclosed order, where 'Fence meets fence in owners' little bounds', finds themselves also 'imprisoned, ill at ease', as Clare puts it in 'The Mores' (2004: 90). The dis-ease occasioned by this cut-off condition (for which compensation would later be found in the increasingly frenetic shopping of commodity fetishism) contrasts with the psychophysical nourishment afforded by the interconnectedness of co-becoming, such as Clare celebrated, for example, in his fond recollection of co-habitation with the big old tree, whose felling he laments in 'The Fallen Elm' (2004: 141–3). Hailed as a 'friend not inanimate', who 'murmured in our chimney top / The sweetest anthem autumn ever made', this beloved tree is said to have provided 'comfort to our heart's desire', summer shade for children's play and a nesting-place for the mavis (a thrush, whose highly musical song would no doubt have occasioned further delight following the birds' return from their annual migration to breed). By contrast with the animate character of this hospitable arboreal companion, the landlord who had it felled is implicitly classed among those soulless humans who (recalling the 'animated post' of 'A Ramble') are figured as 'stocks and stones ... many formed of flesh and bones.' Here too, a further dimension of the mindset of the new order emerges in Clare's ironic references to its rhetoric of 'freedom', whereby the legal freedom of property owners to dispose of their possessions however they see fit is shown to be eroding the liberty, livelihood and hence life chances of the rest. Thus, for instance, when:

The common heath – became the spoiler's prey:
The rabbit had not where to make his den
And labour's only cow was drove away.
...
Such was thy ruin, music-making elm:
The rights of freedom was to injure thine.
As thou wert served, so would they overwhelm
In freedom's name the little that was mine. (Clare 2004: 143)

In addition to modelling ecopoetically the cultural work of deep sustainability, then, Clare's verse provides a diagnosis of the roots, at once socio-economic and psycho-social, of the potentially ecocidal trajectory of industrial modernity in the failure to cultivate delight in, and respect for, the domiciles and lifeways of more-than-human others and the

communicative matrices co-created by their vital interactions. 'To a Fallen Elm,' in which the impact of the enclosed order cuts closest to home for Clare's speaker, has acquired a new salience, moreover, in light of the loss of almost all elm trees throughout Britain, as well as much of Europe, Canada and New Zealand. 'Dutch Elm disease' was first identified in Holland in the 1920s, but the most recent and considerably more pathogenic strain of the beetle-borne fungus that affects elms, and to which the iconic English elm is particularly vulnerable, entered Britain only in the 1960s, evidently on a shipment of timber from Canada (Gibbs et al. 1994): Britain's elms, then, have now fallen victim *en masse* to the transnational trade in 'natural resources,' a key element in the unsustainable 'Great Acceleration' of the industrial order of the Anthropocene that Clare saw taking hold in Helpston in the 1820s.¹⁰

On the eve of a new outbreak of this disease that was reported to be threatening Britain's remaining English elms in 2010 (Seddon 2010), however, some of the trees that had died previously were afforded a kind of afterlife in an eco-poetic art installation undertaken by David Morley as part of a Slow Art project initiated by Chrysalis Arts on the grounds of the Bolton Abbey Estate in Yorkshire in 2008. Morley's indebtedness to Clare as an eco-poet is most evident in the tribute that he pays his Romantic predecessor in a book-length sonnet series entitled *The Gypsy and the Poet* (2013), which also honours the 'gypsy,' Wisdom Smith, another frequenter of the disappearing commons with whom Clare is known to have conversed. Himself of Roma heritage, Morley is by training a conservation biologist, and committed to exploring how poetry might contribute materially to increasing the species diversity of a given habitat. In his contribution to the Slow Art installation, he attempted this by acquiring some elm planks that had been stored long enough for the offending fungus to depart, on separate pieces of which he carved a series of haiku, written in response to the remnant of ancient oak forest, Strid Wood, in which they were then sited on short poles. The carved words of these 'Ankle-High Haiku' were filled with potter's clay and consequently teemed with microbes from the human hands in which it had been moulded. These literally living words of clay were subsequently 'read,' firstly, by algae attracted to the microbes, then by lichens attracted by the algae, which in turn lent the letters a greenish hue, rendering them more visible to any passing humans (especially children, in whose eyeline they are located), as well as attracting birds, who 'read' them in their own way as a source of suitable nesting material. Morley's eco-poetic experiment instantiates a synergistic practice of more-than-human co-creation by opening a space that invites other species to get in on the act as they appropriate his artwork to enlarge their habitat. Stumbling upon Morley's 'Ankle-High Haiku,' possibly while waiting for their canine companions to add to the species diversity of the upcycled elm planks by pissing on

them, human visitors to Strid Wood, meanwhile, are invited by these literally green words to attend more closely to their wooded environs. Coming upon ‘Sussuration,’ for instance, they might read:

The Academy
Of Ancient Root systems is
Open. Hush. Listen. (Morley 2014)¹¹

Prompted to listen for the sound of wind in the leaves, the audible self-disclosure of the trees, human readers are encouraged also to consider, and ideally delight in, the material intelligence, creative agency and communicative capacity of the varied more-than-human others who have co-created the space in which they find themselves.

It was, as it happens, Morley’s erstwhile colleague at Warwick University, Jonathan Bate, who launched the ecocritical re-evaluation of Clare and, in particular, his bird’s nest poems to which Morley’s Slow Poetry project also pays tribute, albeit more obliquely. In its interweaving of Heideggerian phenomenology, Adorno and Horkheimer’s Marxist critique of the domination of nature within capitalist modernity, and Michel Serres’s notion of a ‘natural contract,’ Bate’s take on Clare in *The Song of the Earth* was important in foregrounding the relationship between human psychophysical wellbeing and socio-ecological conditions. As I have argued elsewhere (Rigby 2004), however, I think that in his reception of Heidegger, Bate is lured into an anthropocentric over-valuation of the poetic word: while a poem might invoke and, in its musicality partially echo some of Earth’s diverse more-than-human voices, to cast any work of merely human words as ‘the song of the earth’ (Bate 2000: 251) risks falling prey to a colonising kind of human self-aggrandisement. From a posthumanist material ecocritical perspective, then, it is important to stress that for all the tender protectiveness that Clare’s poems evince towards birds and their nests, they themselves are, as it were, empty nests, inevitably failing to provide the space for the nurturance of flourishing more-than-human life that he so desperately, and ultimately despairingly, sought to safeguard. As an element in the wider discursive–material matrix in which humans intra-act with more-than-human others, however, literature that invites its readers to pay empathetic attention to the surprising lives and strange *Umwelten* of otherkind can potentially help to foster the bio-inclusive ethos of hospitality that necessarily undergirds a bioproportional model of sustainability, as well as awakening a desire to experience the kinds of onto-poetic encounter that such literature might invoke. But only ‘potentially’: for, to recall a motto of the Scholastics, ‘whatever is received is received according to the mode of the receiver’ (*quod quip recipitur ad modum recipientis recipitur*; Bretzle 2013: 200), which is in turn dependent upon a host of extra-literary material–discursive factors (cultural, social, political, economic, geographic, institutional, personal etc.).

The same is true, of course, of the human reception of Morley's 'Ankle-High Haiku'. As a work of ecopoetics, however, the Slow Poetry trail marks a necessary movement beyond both the cultural-historical and aesthetic limits of Romantic nature poetry. At a time of escalating anthropogenic extinctions, Clare's ethic of letting be is insufficient: the restoration of bioproportionality demands that humans actively create affordances for the flourishing of other species, whose habitat, like that of the woodland birds invited to avail themselves of the lichen on Morley's 'Ankle-High Haiku', is being anthropogenically eroded.¹² Moreover, at a time when ever more people, and especially children, are being lured into simulacral worlds of more or less exclusively human construction, ecopoetic projects that draw their recipients outdoors have a better chance than mere words on a page of fostering a taste for the alternative hedonism afforded by spending time with free-living plants and animals and the lively, communicative and (if we follow Mathews's panpsychist premise) sentient places in which they might be met. Making material provision for other-than-human dwelling through creative practices of bio-inclusive hospitality, ecopoetics beyond-the-page simultaneously works towards the transvaluation of human desires by opening recipients to the deep pleasure of onto-poetic encounter.

Clearly there is much that needs to be done in a range of ways and contexts, and with varying degrees of urgency and difficulty, to bridge the sustainability gap. Literature, especially that which entails and discloses intra-active processes of multi-species co-creation, can play a part in this by contributing to that shift in underlying attitudes, assumptions, values and desires which would be conducive to the safeguarding of planetary boundaries in the interests of the renewed flourishing of Earth's diverse more-than-human life.

Notes

- 1 Plumwood's move into literary territory in this essay was encouraged by the invitation to present a keynote lecture at the 2002 conference of the UK Association for the Study of Literature and Environment: the essay is based on that plenary presentation, and enriched by the discussions it occasioned.
- 2 See also Conniff (2012) for a succinct discussion of a number of other lines of critique of the concept of 'ecosystem services' and, in particular, attempts to price them.
- 3 See e.g. Nash, who refers to 'all creatures, human and otherkind' (1996: 9). More recently, Anne Elvey has defined this term more inclusively to include 'both those we understand as living (e.g., fleas, whales, and eucalypts) and those we understand otherwise (e.g., glaciers, sand, and air)' (2014: 36).
- 4 'Caring for country' should not be confused with Western ecofeminist 'ethics of care'. It has a foundation in traditional ecological knowledge ('Law'), rather

than sentiment (although Indigenous Australians do evince a high degree of affective attachment to their ancestral homelands) (Rose et al. 2002). Presupposing more-than-human agency, communicative capacity and human–nonhuman connectivity and kinship, ‘caring for country’ entails something rather more like the considered practice of intra-active material–discursive interrelationship among diverse human and nonhuman actants envisaged by Adeline Johns-Putra (2013) in her new materialist model of environmental care. The (thus far) most extensive historical study that amply evidences the socio-ecological efficacy of Aboriginal land management in sustaining very high levels of biodiversity over extremely long time periods is Gammage (2011). It should be stressed that this case should not be assumed to be universally representative of indigenous culture *per se*, not does it preclude the possibility that the distant ancestors of Australia’s First Nations peoples might have inadvertently contributed to the extinction of the megafauna that they encountered on this continent some 40–60,000 years ago, many of which nonetheless co-existed with humans for at least another 30,000 years, succumbing only after the climate changed from cold-dry to warm-dry and water became scarcer at the end of last glacial maximum (Musser 2014).

- 5 ‘Ecological civilisation’ is a Chinese concept with roots in Taoist philosophy that Mathews has been studying for several years, in collaboration with colleagues in China. Mathews currently holds the position of Adjunct Professor of Eco-Civilisation Studies at Monash University’s Institute of Sustainability.
- 6 For an overview, see Rigby (2006).
- 7 On Romanticism and ecocriticism, see Rigby (2014).
- 8 Clare’s attention to species-specific *Umwelten* is also discussed by Washington (2014: 666) and examined in the wider context of Romantic-era precursors to biosemiotics in Rigby (2015a).
- 9 In this connection, Irvine and Gorji cite from a letter Clare wrote in connection with his relocation from Helpston to Northborough: ‘the very molehills on the heath and the trees in the hedgerow seem bidding me farewell’ (2013: 123).
- 10 Evidence for the Great Acceleration is provided in Steffen (2004) in a series of graphs charting changes in human activities and correlating environmental impacts along j-curves, all of which take off during or from the 1950s.
- 11 This is also discussed in the series of Slow Poetry videos available at www2.warwick.ac.uk/newsandevents/audio/more/slowpoetry.
- 12 Morley’s contribution to the Slow Art project also involved the commissioning of a series of bird-boxes, on each of which he inscribed a poem that he had written in response to the morphology, habits and vocalisation of the particular species for which the box was likely to be most attractive. Dubbed ‘Bard Boxes,’ these were then sited in appropriate places to afford additional nesting opportunities (Morley 2014).

References

- Adorno, Theodor and Max Horkheimer [1944] 1979. *Dialectic of Enlightenment*. Trans. John Cumming. London: Verso.

- Alaimo, Stacy 2012. 'Sustainable This, Sustainable That: New Materialisms, Posthumanism, and Unknown Futures', *PMLA* 127 (3): 558–64.
- Altman, Jon and Seán Kerins (eds) 2012. *People on Country: Vital Landscapes, Indigenous Futures*. Sydney: Federation Press.
- Barad, Karen 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.
- Bate, Jonathan 1991. *Romantic Ecology: Wordsworth and the Environmental Tradition*. London and New York: Routledge.
- Bate, Jonathan 2000. *The Song of the Earth*. Boston: Harvard University Press.
- Bate, Jonathan 2003. *John Clare. A Biography*. London: Picador.
- Becker, Matthias et al. 2013. 'Hybridization May Facilitate *In Situ* Survival of Endemic Specie through Periods of Climate Change', *Nature Climate Change* 3: 1039–43. www.nature.com/nclimate/journal/v3/n12/full/nclimate2027.html. Accessed 15 February 2017.
- Botkin, Daniel 1990. *Discordant Harmonies: A New Ecology for the Twenty-First Century*. Oxford: Oxford University Press.
- Bresnihan, Patrick 2013. 'John Clare and the Manifold Commons', *Environmental Humanities* 3 (1): 71–91.
- Bretzle, James T. 2013. *Consecrated Phrases: A Latin Theological Dictionary*. Collegeville, MN: Liturgical Press.
- Brunner, Ronald B. and Amanda H. Lynch 2010. *Adaptive Governance and Climate Change*. Chicago: University of Chicago Press.
- Campbell, Colin 1987. *The Romantic Ethic and the Spirit of Modern Consumption*. Oxford: Blackwell Publishing.
- Castree, Noel et al. 2014. 'Changing the Intellectual Climate', *Nature Climate Change* 4: 763–8.
- Clare, John 2004. *Selected Poems*. Ed. Jonathan Bate. London: Faber & Faber.
- Conniff, Richard 2012. 'What's Wrong with Putting a Price on Nature?', *Yale Environment* 360, 18 October. http://e360.yale.edu/feature/ecosystem_services_whats_wrong_with_putting_a_price_on_nature/2583/. Accessed 15 February 2017.
- Coole, Diana and Samantha Frost (eds) 2010. *New Materialisms: Ontology, Agency, and Politics*. Durham, NC: Duke University Press.
- Cudworth, Erica 2005. *Developing Ecofeminist Theory: The Complexity of Difference*. London: Palgrave Macmillan.
- Cuomo, Christine J. 1998. *Feminism and Ecological Communities: An Ethic of Flourishing*. London: Routledge.
- Day, Aidan 1996. *Romanticism*. London: Routledge.
- Derrida, Jacques and Anne Dufourmantelle 2000. *Of Hospitality: Anne Dufourmantelle invites Jacques Derrida to Respond*. Trans. Rachel Bowlby. Stanford, CA: Stanford University Press.
- Elvey, Anne 2014. "'Who is the Greatest?" Reading Luke 22.24–27 Ecologically', *Ecotheology* 1: 35–48.
- Eichler, Margrit 1999. 'Sustainability from a Feminist Sociological Perspective: A Framework for Disciplinary Reorientation'. In *Sustainability and the Social Sciences: A Cross-disciplinary Approach to Integrating Environmental Considerations into Theoretical Reorientation*. Ed. Egon Becker and Thomas Jahn. London: Zed Books: 182–206.

- Fischer, Joern et al. 2007. 'Mind the Sustainability Gap', *Trends in Ecology and Evolution* 22 (12): 621–4.
- Gammage, Bill 2011. *The Biggest Estate on Earth: How Aborigines Made Australia*. Sydney: Allen & Unwin.
- Gibbs, John, Clive Brasier and Joan Webb 1994. 'Dutch Elm Disease in Britain', Forestry Authority Research Note 252. [www.forestry.gov.uk/pdf/RIN252.pdf/\\$file/RIN252.pdf](http://www.forestry.gov.uk/pdf/RIN252.pdf/$file/RIN252.pdf). Accessed 15 February 2017.
- Griggs, Dave et al. 2013. 'Sustainable Development Goals for People and Planet', Comment in *Science* 495 (21 March): 305–7.
- Heidegger, Martin 1993. 'The Question Concerning Technology' [1953]. Trans. William Lovitt. In *Basic Writings*. Ed. David Farrell Krell. San Francisco: HarperSanFrancisco, 307–42.
- Irvine, Richard and Mina Gorji 2013. 'Clare in the Anthropocene', *Cambridge Anthropology* 31 (1): 119–32.
- Johns-Putra, Adeline 2013. 'Environmental Care Ethics: Notes toward a New Materialist Critique', *Symplokē* 21 (1–2): 125–35.
- Kerridge, Richard 2009. 'Green Pleasures'. In *The Politics and Pleasures of Consuming Differently*. Ed. Kate Soper, Martin Ryle and Lyn Thomas. Houndmills: Palgrave Macmillan, 130–53.
- Manning, Adrian D. et al. 2008. 'Landscape Fluidity: A Unifying Perspective for Understanding and Adapting to Global Change', *Journal of Biogeography* 35 (2): 193–9.
- Mathews, Freya 2003. *For Love of Matter: A Contemporary Panpsychism*. New York: State University of New York Press.
- Mathews, Freya 2005. *Reinhabiting Reality: Towards a Recovery of Culture*. New York: State University of New York Press.
- Mathews, Freya 2009. 'Introduction: Invitation to Ontopoetics', *Philosophy Activism Nature* 6: 1–6.
- Mathews, Freya 2010. 'On Desiring Nature', *Indian Journal of Ecocriticism* 3: 1–9.
- Mathews, Freya 2013. 'Is an Ethic of Biodiversity Enough?' *The Conversation*, 7 February, <https://theconversation.com/is-an-ethic-of-biodiversity-enough-11425>. Accessed 15 February 2017.
- Mathews, Freya 2016. 'From Biodiversity-Based Conservation to an Ethic of Bioproportionality', *Biological Conservation* 200: 140–8.
- Mentz, Steve 2012. 'After Sustainability', *PMLA* 127 (3): 586–92.
- Merchant, Carolyn 1980. *The Death of Nature*. London: Wildwood.
- Morley, David 2013. *The Gypsy and the Poet*. Manchester: Carcanet.
- Morley, David 2014. 'Natural Magic'. Lecture presented to the Literary and Cultural Research Network, Monash University, 28 July.
- Musser, Anne 2014. 'Megafauna Extinction Theories: Patterns of Extinction'. National Museum of Australia. 30 October. <http://australianmuseum.net.au/megafauna-extinction-theories-patterns-of-extinction>. Accessed 15 February 2017.
- Nash, James A. 1996. 'Toward the Ecological Reformation of Christianity', *Interpretation: A Journal of Bible and Theology* 50 (1): 5–15.
- Plumwood, Val 1993. *Feminism and the Mastery of Nature*. London: Routledge.
- Plumwood, Val 2006. 'Deep Sustainability as Cultural Work'. Unpublished contribution to Sustainability workshop, ANU, June. Accessible on 'Remembering Val

- Plumwood: A Memorial Site to Honour the Life and Work of Val Plumwood' <http://valplumwood.wordpress.com/category/sustainability/>. Accessed 15 February 2017.
- Plumwood, Val 2007. 'Journey to the Heart of Stone'. In *Culture, Creativity and Environment: New Environmentalist Criticism*. Ed. F. Becket and T. Gifford. Amsterdam: Rodopi, 17–36.
- Plumwood, Val 2009. 'Nature in the Active Voice', *Australian Humanities Review* 46: 113–29.
- Rigby, Kate 2004. 'Earth, World, Text: On the (Im)possibility of Ecopoiesis', *New Literary History* 35 (3): 427–42.
- Rigby, Kate 2006. 'Minding (about) Matter: On the Eros and Anguish of Earthly Encounter', *Australian Humanities Review* 38 (April). www.australianhumanitiesreview.org/archive/Issue-April-2006/EcoRigby.html. Accessed 15 February 2017.
- Rigby, Kate 2008. 'Noah's Ark Revisited: (Counter-)Utopianism and (Eco-)Catastrophe'. In *Demanding the Impossible: Utopia and Dystopia*. Ed. Andrew Milner, Matthew Ryan and Simon Sellars. Special issue of *Arena Journal* 31. North Carlton: Arena Publications, 163–78.
- Rigby, Kate 2009. 'Dancing with Disaster', *Australian Humanities Review* Issue 46 (May). www.australianhumanitiesreview.org/archive/Issue-May-2009/rigby.html. Accessed 15 February 2017.
- Rigby, Kate 2014. 'Romanticism and Ecocriticism'. In *Oxford Handbook of Ecocriticism*. Ed. Greg Garrard. Oxford: Oxford University Press, 60–79.
- Rigby, Kate 2015a. 'Earth's Poesy: Romantic Poetics, Natural Philosophy, and Biosemiotics'. In *De Gruyter Handbook of Ecocriticism and Cultural Ecology*. Ed. Hubert Zapf. Berlin: De Gruyter, 45–64.
- Rigby, Kate 2015b. *Dancing with Disaster: Histories, Narratives, and Ethics for Perilous Times*. Charlottesville: University of Virginia Press.
- Rose, Deborah Bird, with Sharon D'Amico et al. 2002. *Country of the Heart: An Indigenous Australian Homeland*. Canberra: Aboriginal Studies Press.
- Seddon, Mark 2010. 'A Fresh Outbreak of Dutch Elm Disease is Threatening the Existence of the UK's Remaining English Elm Trees'. *BBC Newsnight*, 21 August. <http://news.bbc.co.uk/2/hi/programmes/newsnight/8912727.stm>. Accessed 15 February 2017.
- Soper, Kate 2011. 'Passing Glories and Romantic Retrievals: Avant-Garde Nostalgia and Hedonist Renewal'. In *Ecocritical Theory: New European Approaches*. Ed. Axel Goodbody and Kate Rigby. Charlottesville: University of Virginia Press, 17–29.
- Soper, Kate, Martin Ryle and Lyn Thomas (eds) 2009. *The Politics and Pleasures of Consuming Differently*. Houndmills: Palgrave Macmillan.
- Steffen, Will 2004. *Global Change and the Earth System: A Planet under Pressure*, IGBP Book Series. Berlin: Springer-Verlag.
- Sustainable Development Solutions Network Leadership Council 2013. 'An Action Agenda for Sustainable Development: Report for the UN Secretary-General', 6 June. <http://unsdsn.org/resources/publications/an-action-agenda-for-sustainable-development/>. Accessed 15 February 2017.
- Uexküll, Jakob von 2010. *A Foray into the Worlds of Animals and Men, with a Theory of Meaning [1934]*. Trans. Joseph D. O'Neill, intro. Dorion Sagan,

- afterword Geoffrey Winthrop-Young. Minneapolis: University of Minnesota Press.
- United Nations General Assembly 2005. '2005 World Summit Outcome: Resolution Adopted by the General Assembly,' 24 October, A/Res/60/1. www.refworld.org/docid/44168a910.html. Accessed 15 February 2017.
- Washington, Chris 2014. 'John Clare and Biopolitics,' *European Romantic Review* 25 (6): 665–82.
- World Commission on Environment and Development 1987. *Our Common Future* (Brundtland Report). Oxford: Oxford University Press.