Introducing The Edinburgh Companion to Animal Studies

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Companion comes from the Latin *cum panis*, 'with bread.' Messmates at table are companions. Comrades are political companions. A companion in literary contexts is a vade mecum or handbook, like the Oxford Companion to wine or English verse; such companions help readers to consume well.

(Donna J. Haraway)¹

The invitation to edit a reference work under the heading of *The Edinburgh Companion to Animal Studies* immediately called to mind the influential work of Donna Haraway, broadly in light of her long-term development of the field and specifically in terms of her dilation of the name 'companion' and provocation as to what might constitute 'companion species'. It is ironic that no one chapter became dedicated to it. Rather, this vexatious, intriguing, capacious term infected the book overall, directly inflecting numerous chapters from 'Ethics' to 'Empathy' to 'Microbes' to 'Science Fiction', provoking a wide range of responses as to what 'company' might entail, speaking to our editorial process and prompting the opening thoughts of this introduction.

A Study

Tigers may not want to break bread with us, or keep our conspicuous company around a literal table (while they may be constrained to do so in the spectacular hothouse of the zoo, as in Bonnie Ora Sherk's *Public Lunch* performance, discussed in the chapter on 'Food'). Nevertheless, we are unavoidably 'companions' in Haraway's sense quoted in our epigraph, 'becoming-with' others in diverse and unexpected ways. For our opening foray we turn to a particular tiger.

Black Tiger is an animal study made by expedition-based artist duo Olly and Suzi in one of the tiger reserves of Uttar Pradesh in India during 1998. A large sheet of paper is held up, like a banner to be photographed. Black ink runs in varied densities across the sheet of paper, settling into the outline of a tiger ambling along. The narrow rim between the paper and photograph edge exposes glimpses of sand, sky, buildings, trees, grass and the distant outline of a man. This is possibly one of the trackers who helped the artists follow this tiger, not to hunt, but in order to paint her picture. Hands on either side of the drawing bear it aloft, making sure that it is seen. The tiger is walking head down, tail curled, belly digesting. If her coat has stripes, they are obscured. Her painted legs, poised to leave paw prints in the sand, are cropped by the bottom edge of the paper.

We chose *Black Tiger* as our cover image for *The Edinburgh Companion to Animal Studies* to mark the urgency of finding ways to tell, picture and follow the lives of animals in the global context of habitat loss, extinction and the animal industrial complex driven by capitalism. The title used by the artists does not refer to a species or subspecies of tiger, but to the coloration produced by pseudo-melanism, which disperses the familiar pattern and solidity of stripes. This is an effect thought to be produced by inbreeding due to the restricted gene pools of now depleted populations. While numbers of Bengal Tigers are today increasing due to conservation efforts, they remain listed as endangered.² That is to say, they are at serious risk of extinction in the foreseeable future.

When this volume was commissioned the World Wildlife Fund had already announced that the world had lost half of all wildlife over the last forty years, a petrifying rate with dismal prognosis for remotely recognisable multispecies futures.³ Writing this introduction in early 2017, the precarity of the hard-won protections fought for by animal and environmental activists and agencies is only too palpable. The 2015 United Nations Framework Convention on Climate Change (COP21) momentarily secured a 'better late than never' commitment to keeping global warming to below 2° above pre-industrial levels. However, the Paris Agreement now falters after the world's largest economy has seen the election of a new President who has noisily suggested backing out of this Agreement, even dismissing its premises as a 'hoax'.⁴ No one can seriously imagine that such climate change denial is a failure to understand science that might be solved by a plainer explanation. Clearly it is a wilful refusal to acknowledge thinking and practices that challenge the embedding of private profit in multinational corporate interests, frequently identified with fossil fuel industries.

Held up like a banner, *Black Tiger* can be read as a call to activism, a rallying point to draw in new publics. But the suspended paper is also a subtle membrane between diverse ecologies, expanding potential sites of political action by bringing various edges – disjunctions, infestations, exposures and collaborations – to the fore. These uncertain pictorial edges are often edited out when we represent or address animals, but they have become pressing for animal studies scholarship, given the entangled ways that different lives – animal and otherwise – come to matter.

In the process of writing this collaborative account of Black Tiger we find ourselves fielding what counts as the coordinates of the picture beyond its visible borders. Only too frequently in the Western cultural imaginary our relation with and to animals has primarily been one of definite borders, distancing and denial. A critical activity of framing and reframing denaturalises dominant ways of seeing and scaling animals, bringing into focus kinships, stories, affects and dependencies that may otherwise be elided. Building on an extensive tradition of animal studies scholarship, this is one of the important undertakings of this volume. But the narrow field between paper and photographic edge, and the ambiguous script of the tiger's gut are also reminders of the many ecological relations entangling animal and human lives. These relations are often too tiny or vast, ubiquitous or singular, subliminal, multiple or discordant to be studied through one lens, or to register as familiar sentient states or attunements.⁵ Thus a second provocation of this Companion, always made in conjunction with the first, is for animal studies to cultivate new kinds of peripheral attention, improvised imagination, interdisciplinary diplomacy and interspecies company.

Anticipating the perhaps surprising number of excursions that this *Companion* makes into rethinking who we – humans – take ourselves to be in relation to other animals, our focus is drawn to the top of the image. Here the two hands that hold the *Black Tiger* drawing visibly belong to two different people. Metonymically, the implied bodies of Olly and Suzi extend the horizontal plane of this picture beyond its apprehensible structure of a frame within a frame, a drawing within a photograph. Wrong-footing our classically centralised viewing position, the specific crop of this image also suggests a back and forth movement of other vantage points. On the left in the less focused distance stands an Indian man, possibly the former hunter turned conservationist Billy Arjan Singh, who worked with a team of trackers helping the artists follow this tiger.⁶ Artists, paper, photographer and the viewer's implied presence are all in his line of sight. We understand that the two artists that sign this work are formalised as a duo, but hands and gaze tease the scene out further in diverging directions.

Each instance of Olly and Suzi documenting a work in the manner staged in *Black Tiger* also incorporates the artists' hands. This is plausible in terms of the practicality of documenting on-location work – for which there may be various time or environmental pressures. It also performs an idiosyncratic signature, echoing the more conventionally inscribed one on the bottom left of the drawing. While another style of practice by these artists allows for their works to be touched by (and marked by) the animals that they picture, in this instance painted paws do not make an impression. However, as with documentation showing the duo at work, together, two-handedly at once on the same drawing, the figure of the artist wrought by Olly and Suzi is itself faintly unsettling. Their showing or monstration of difference gestures away from the privilege given to 'the hand' as synecdoche for the autonomous individual in the imaginary of the human.⁸

In the periphery between the edge of the drawing and its setting within the photograph, the multiple hands in play in the making of this work are set within a larger ecology of semiotic, economic, atmospheric, built, botanic, geologic, colonial and technological relations. Within the drawing, ink patterns dissolve in landscape-like and even cosmic configurations: ground and sky swirl. The singularity of *this* tiger is also a contact zone for other affinities across macro and micro foci. Across the tiger's belly, a broad line zig-zags in a style both inscriptive and intestinal, conjuring up feline physiology. Again the surface of the paper also implies a depth, in this case a belly as a point of commonality between living entities. Yet this most intimate inside is also an 'outside', insofar as the biological workings of all bodies and their microbial collaborations are often known and felt indirectly.

Assembly

We understand the *Companion* to speak to both senses of the 'critical'. As one of our contributors, Dawne McCance, has made plain, it summons both the tradition of critical thought, of discernment and interpretation, and the sense of a world in crisis. These two senses combine to bring perhaps surprising case studies to attention under the heading of a *Companion to Animal Studies*. Critical attention to the edges invokes the influential thought of Jacques Derrida and especially the play of what he calls limitrophy, a notion that is affirmed directly and indirectly by numerous contributors

to this collection. Developed in particular in his posthumous book *The Animal That Therefore I Am*, limitrophy offers a cultivation of differences that grow rather than the more habitual models that restrict differences to that between discrete entities (whether there are two or a thousand) or entrench the limit as a categorical line in the sand. ¹⁰ In the case of the historically and philosophically assumed division between human and animal, this does not mean swapping a clean and hierarchical distinction for a flat equivalence. Nor does it necessarily lead to abandoning the seemingly insurmountable difference between humans and other animals: instead this abyss itself becomes a thickened site of cultivation. In this light, with Derrida, we ask '[w]hat are the edges of a limit that grows and multiplies by feeding on an abyss?'¹¹

A commodious diet such as that evoked by 'feeding on an abyss' means that of necessity contributors to this *Companion* pose the 'question of the animal' in a range of ways. When Edinburgh University Press solicited the *Companion* in 2014, we were invited to go beyond simply commissioning new essays with an animal focus.¹² The Press strongly encouraged a volume that might generate future research by anticipating or provoking the kinds of strategies, modes or directions that need to come into play. It was already clear that the flourishing international and interdisciplinary scholarship in animal studies now meant that this question was frequently identified as something on the agenda in arenas far beyond a narrow specialism.¹³ Over the last twenty years or so, numerous international publishers have dramatically expanded their lists to include animal studies (Palgrave, Brill, Minnesota, Columbia, Bloomsbury, Rodopi, Sydney and Edinburgh, to indicate some of the most obvious and Anglophone examples).

Casual invocation of the concept of 'the animal', however, would be to repeat the problem if we fail to realise the performative work it undertakes. This violently false singular 'corrals' all non-human animals within the concept, in the attempt to defend against any limitrophic leeway.¹⁴ It is inseparable as a gesture from the elevation of 'the human' as an absolutely separate and exceptional being. At its unreflective worst, the concept of 'the animal' effectively licenses a death sentence for those so described, as Derrida argues in the context of normative ethical divisions between a 'who' and a 'what' with its consequent disregard for any ethical, political or juridical responsibility towards the latter.¹⁵ In other words, a 'what' is not a subject before the law and thus, in the extreme instance, cannot be murdered. It is clear that this performative corral called 'the animal' can be applied to other humans such as those we call criminals and those we call enemies, as well as to animals under the cover of what Derrida critically identifies as a 'non-criminal putting to death'. 16 Neither would it suffice to simply contrast ethological endeavour with theoretical opining. David Wood acutely observed that the now famous morning scene between Derrida and a little cat draws on an 'uncanny' strength precisely because of the way in which it reveals the quotidian and the philosophical as inextricably embedded (rather than because a philosopher suddenly acknowledged the world).¹⁷

In more over-arching terms, the question of the animal has spurred a thoroughgoing reimagining of the humanism in the humanities as such and the opening of paths to a posthumanism and a posthumanities. The theoretical writing of Cary Wolfe, as well as that which he has supported as a prolific editor, has significantly encouraged this path. As Wolfe emphasises, the critical opening signalled by the prefix 'post-' does not supersede the 'human' with something greater, nor is it a matter of simply adding 'the animal' to lists of existing humanities topics. Neither is posthumanism

content with a mere 'decentring' of the human, whether by 'evolutionary, ecological or technological co-ordinates'. ¹⁹ We must also ask after 'what thought has to become in the face of such challenges', that is, how the practice of animal studies itself might be transformed. ²⁰ Many of the contributors to this volume share in these moves, not least the necessity for a rapprochement between the humanities and the sciences, even if they may not – cannot – narrowly cohere around a settled aim, as the chapter directly devoted to 'Posthumanism' in the *Companion* explores.

Perhaps there was something of a giddy encyclopaedic ambition at the idea of the breadth of scholarship that could be mobilised for a *Companion to Animal Studies*. Such an ambition might well have put pressure on the girth of the hardcopy. Yet the volume is tempered with the knowledge, and the ethical good, of the constitutive impossibility of any such encyclopaedia or 'God's eye view'. The organisation of the chapters then submits to the formality of alphabetisation, but without forming a totalising 'A to Z', whether of animals, authors or approaches.

Nevertheless, in setting to work on commissioning chapters for The Edinburgh Companion to Animal Studies, there were a number of topics and questions that we definitely wanted authors to engage. Inviting responses to named thematics allowed for ways of thinking about a multitude of species and singular animals. Themes such as evolution, geography, abjection, meaning (including biosemiotics) and death are invoked in various ways in myriad animal lives. Some chapters reflect on how animals have been understood and subsumed within culture that is assumed to be human, such as those on Art, Film, or Literature. Others, such as Voice, Meaning, Poetics or Performance, trouble the assumption that creative play is unique to human life and distinct from the realms of instinct and nature. And, taking a larger view of the scholarly field, there are chapters that reflect upon systems of thought and representation. The latter expand the company of theoretical sources to which animal studies has turned to date well beyond those most evidently shaping this introduction (Haraway, Derrida, Wolfe). Other frames of thought given attention here include object-oriented ontology; the 'non-philosophy' of François Laruelle; play according to Brian Massumi; the polymathic anthropology of Gregory Bateson; psychoanalysis from Sigmund Freud to Julia Kristeva; the Umwelt of biologist Jakob von Uexküll; Michel Foucault's technology of care; and the Amerindian perspectivism of Eduardo Vivieros de Castro.

Sometimes our negotiations with authors resulted in surprising alternatives that developed into theoretically arresting work (such as the concept of 'Fragility', or the focus on extremophiles in the chapter on 'Technology'). Sometimes we had to check the enthusiasm of our contributors predominantly clustering around emerging objects of attention: in 2015 and 2016 many animal studies scholars wanted to turn either to microbes or to plants ('Microbes' has a dedicated chapter; plants are addressed specifically in the 'Races' chapter). These two examples give a sense of the intellectual thirst for new species to think in collaboration with. More affirmatively, they demonstrate the extent to which the shakedown of the once considered hard and fast human/animal distinction demands that all our categories – and their relations with one another – need be reimagined.

As several chapters in the *Companion* powerfully argue, by drawing on Indigenous studies scholars ranging from Eduardo Vivieros de Castro to Kim TallBear and Deborah Bird Rose, this re-imagination is not primarily a matter of 'discovering' new trajectories in Western thinking. Rather it should begin by acknowledging the rich

ontologies of relation opened up by Indigenous and other non-Western cultures. On the one hand, this necessitates a critique of the narrowness of the 'we' that is supposed whenever 'the human' is evoked. On the other, it entails an openness on the part of a Western-dominated animal studies tradition, to learn from diverse non-Western philosophies of kinship, care and political struggle. More broadly, for many of the authors collected in the *Companion*, genealogies of animal studies need to recognise their imbrication with, and enrichment by, the political struggles of the global south, race, class and colonialism and feminism, rather than focusing narrowly on competing Western 'analytic' and 'continental' ethical traditions. The urgency of relating our entanglement with other living and non-living agencies in ways that do not elide these diverse struggles is given specific focus in the chapter on the recently named geological period of the Anthropocene, a naming that awards this unified concept planet determining proportions.²²

Composures

At the time of writing the sacrificial logic of 'the animal', in tandem with a misogynist's charter, was enshrined anew after a film exposing a crude discussion of the sexual benefits of fame failed to derail the 2016 presidency campaign of the man who is now leader of the free world. The infamous boast that he could 'Grab 'em by the pussy. You can do anything' positioned women as animal-like through the domesticated fetish of the term 'pussy'. 23 In ways that recall Carol Adams's work on what she named the 'sexual politics of meat', this reduction of women to 'pussy' delivers an efficiently abbreviated licence for assault.²⁴ A part (pussy) stands for the whole (women), while that part is already transposed into a diminutive pet whose sole attribute is that it can be 'grabbed'. In a single gesture, women and animals are divested of agency and legal protection. The term also doubles as a derogatory term of feminisation aimed at men, who, outside of a heteronormative model, are construed to be weak - to be 'pussies'. This only underlines the investment that virile, masculinist formations of subjectivity have in repudiating what they call feminine as well as what they call animal.²⁵ In more hospitable figural activity, 'pussy' became the resignified figure of agential resistance through which the 2017 Women's March convened protest against the erosion of social justice, not least reproductive justice, under the new president.26 Many protestors visualised this resignification by wearing hand-knitted pink 'pussy hats', a crafty flourish that could be made identical neither with the feminine nor the feline but which fostered resistant kin across the world.²⁷

The erosion of social justice currently taking place in the United States also explicitly extends to the lives of animals when the United States Department of Agriculture (USDA) removes public access to any of its tens of thousands of documents regarding animal welfare. This is not a minor infraction in the scheme of things – such documents refer to regulations regarding practices in research laboratories, slaughterhouses and zoos. Nor is it to overly dwell on the example so prominently offered by the United States at this time. Rather, this recent example points to the systemic capacity for capitalism to privilege the expedience of private profit over any concept of care or responsibility to present and future generations, where those generations are understood to necessarily extend far beyond the human.

Yet there are also hopeful shifts taking place, resisting the reduction of animals and their environments to commodities that are consumed or managed. In stark contrast to the ongoing struggle of the Standing Rock Sioux tribe against the routing of the North Dakota oil pipeline under the Missouri river reservoir, ²⁹ the Whanganui river in Aotearoa New Zealand has recently been awarded the status of a living entity. ³⁰ The latter change in the law was the outcome of a 140-year battle by the people of the Māori tribe of Whanganui in the North Island of Aotearoa New Zealand, to have the river that they name Te Awa Tupa recognised as their ancestor. This ruling has been closely followed by changes in India, where the Ganges and Yamuna rivers have been awarded the status of legal persons. The practical implementation of these new laws is not yet tested. However, they open an avenue to hold individuals, companies and government bodies accountable for direct harm to rivers and their tributaries, as well as the larger nature-culture entanglements they encompass. Such cases could be mounted by the rivers' appointed guardians, which in the Aotearoa New Zealand context would be a representative of the crown and representative of the Whanganui *iwi*.

These recent legal changes bring to the fore tensions that the expanded field of Animals Studies represented in this volume might productively address. On the one hand, the title of 'legal person' recognises the importance of ecological systems that sustain diverse animal and human ways of living, as 'legal identity with all the corresponding rights, duties and liabilities of a legal person'.³¹ But on the other, this is articulated via a legal discourse that takes highly Western anthropocentric understandings of subjectivity, rights and obligations, entrenched in the category 'legal person', and extends these to animals and environments. Given the closely related status of corporations as 'legal persons',³² we might ask if the price of giving ecological entities such as a rivers a legal voice is another extension of the apparatus of capitalism.

To conclude only with this critical stance would be to miss how the authority of such legal changes relies not simply on the precedent of existing legal concepts, but on the hard-fought recognition of Indigenous and other non-Western worldviews. This is particularly palpable in New Zealand, where the authority to change the law is based on the Whanganui *iwi*'s understanding of rivers, mountains and their diverse living inhabitants enmeshed in co-constituting kinship relationships. According to Gerrard Albert, their lead negotiator:

We have fought to find an approximation in law so that all others can understand that from our perspective treating the river as a living entity is the correct way to approach it, as in indivisible whole, instead of the traditional model for the last 100 years of treating it from a perspective of ownership and management.³³

Importantly, by calling the term 'living entity' an 'approximation', Gerrard makes visible the implicated, strategic nature of these changes, while simultaneously pointing to the rich ontologies of relation they draw upon, as rich sites of resistance to capitalism and its dominant human-centred imaginaries.

These examples resonate with our concerns here. In the case of the Te Awa Tupa river, caring for animals is not primarily framed as a matter of securing the rights of individuals, but rather emerges through a commitment to the larger ecology of diverse animal-environment, nature-culture entanglements. As many authors in the *Companion* argue, this expansion should never be a matter of replacing one territory of academic production

with the next. In an era when many hard-fought protections for animals are being eroded, finding ways to acknowledge other animals as sentient subjects, socially, legally and imaginatively, remains urgent. So for example, the project to grant Great Apes legal and social recognition on the basis that they are 'like us' remains pressing. ³⁴ But at the same time, the field of animal studies is provoked to articulate new understandings of care, co-constitution, alterity and responsibility and feeling, which are not firmly anchored in notions of 'sentience' and 'subjectivity' as they are commonly construed. Indeed, if we are to imagine futures other than or beyond the lethal fiction of autonomy staked out by capitalism, then such futures lie in the reconfiguration of what it means to dwell with other species, and thus, by necessity, with larger ecological and geological affections.

In a number of recent works, philosopher Isabelle Stengers has taken on this challenge of imagining the future differently within the inheritance of Western culture. In Capitalist Sorcery she reconceives of the capitalist system not as a matter of legal personhood but under a different frame - that of magic.³⁵ We have been entranced by the market's invisible hand, the magic of the commodity fetish and the sorcery they weave. The challenge is to create counter-spells that allow us to slow down and think, with humans and non-humans affected by the way we live. Stengers's rallying cry that another world is possible is taken up further in her work, In Catastrophic Times: Resisting the Coming Barbarism, where she pits big science wed to big business against an economy and ecology of the commons.³⁶ At the same time, Stengers invokes Gaia as 'the one who resists'. 37 We have for too long taken the earth for granted as a stable support for our actions. But our actions have awoken the name Gaia as one who will interrupt and whose 'blind and implacable transcendence . . . questions our own tales and refrains'. 38 Stengers asks us to learn to tell other tales, 'neither apocalyptic nor messianic ones, tales which entail what Donna Haraway calls response-ability: accepting that what we add makes a difference in the world and becoming able to answer for the manner of this difference'. 39 We hope readers will find such tales and response-ability in this volume - ones called out of us by the other animals upon this earth, and by Gaia.

'With' and 'After'

By way of conclusion, Haraway's work provides us with another rich figure to speak to other futures. Insisting on the earthiness of the living, she reminds us of the etymological *humus* in the human and invokes the shifting decomposing material that is compost: 'We are compost, not posthuman; we inhabit the humusities, not the humanities.'40 The humour, even nerdiness, of the figure is an only partly tongue-in-cheek affirmation of the compost with which, and in which, living things compose and decompose. If it has a faintly ridiculous air, this perhaps counters the varied reception of the crucially ironic tone of her earlier 'cyborg' figuration, and concern over the domestication of 'companion species' into 'companion animals'.⁴¹ Compost shifts the frame to scales and temporalities that cannot be constrained to anthropocentric foci: from microbes in the soil to the layering of geological time. It reframes the conversation away from our accustomed political stratifications of the earth into national borders (lines drawn in the sand) towards a geopolitics of Gaia, that is, the 'complex systemic phenomena that compose a living planet'.⁴² Here geological biospheres, rather than only nations, organise ways of dwelling and thriving for humans and other animals.

In 1970 Newton and Helen Mayer Harrison created a compost pile as an artwork in *Making Earth*, which was a work of sand, sewage sludge, leaf material and

chicken, cow and horse manure. The work focused on the alchemical wonder of transformation for the future. As Newton Harrison explains, 'The mixture combines with time, and our touch, becoming literally a living element, a medium for growth.'⁴³ The art became a way of thinking with the earth, and in order to maintain the work Newton carried out daily tasks: 'Every morning I spend ten minutes of my time with a shovel, ten with a hoe, ten with my hands – and one minute with a hose.'⁴⁴ These basic rituals and contact with making topsoil, including the touch and smell of the compost, created a patterned ecosystem serving as a reflection on larger ecologies and our daily habits. This year (2017), the Harrisons have again taken up composting, now with a work called *Composting in the Pentagon with Worm Tailings*. They see it as a call to pay attention to the ruthless exploitation of the life web.⁴⁵ The Harrisons offer the alternative of putting our efforts back into the earth. The Pentagon shape, of course, echoes that of the US military headquarters and questions where we are placing our priorities. Compost is a politics of the earth with a vision of the more-than-human world.

We might hear yet other senses surfacing in the compost. Given Haraway's insistence on the with-ness of the companion as *com-panis*, we might wilfully hear *com* and *post* as the spatial and temporal markers 'with' and 'after'. 'Compost' thus exacerbates the unknown quality of our becoming-with others in a state of change in a helpful way. Compost dissuades readers from the sometimes romantic, sometimes naïve and often too narrow view that we are immediately in contact with those we call companions (a misapprehension that disregards all those beyond human purview, elides the asymmetrical relations of those who we do know to be 'at the table' and indulges in an anthropomorphic timescale of that which is 'present-to-hand'). Instead, 'compost' makes the discontinuous make-up of diverse animal lives, including our own, a little easier to apprehend. Being both 'with' and 'after' speaks also to the composition of this *Companion* as we three editors communicated between the divergent time zones, terrains, seasons and the ever more divergent climates of the UK, the US and Australia, composting at different speeds and intensities. ⁴⁶ Even the desert of Arizona composts, while London ferments, and in Sydney humidity liquefies.

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Notes

- Donna J. Haraway, When Species Meet (Minneapolis: Minnesota University Press, 2008), p. 17.
- 2. Vidya Venkat, 'Big Cat Population up by 690', *The Hindu Times*, 8 September 2016, http://www.thehindu.com/sci-tech/energy-and-environment/global-tiger-population-up-by-22-per-cent/article8461131.ece (accessed 28 August 2017).
- 3. Christine Dell'Amore, 'Has Half of World's Wildlife Been Lost in Past 40 Years?' *National Geographic News*, 2 October 2014, http://news.nationalgeographic.com/news/2014/09/1409030-animals-wildlife-wwf-decline-science-world/ (accessed 28 August 2017). For the current report see http://wwf.panda.org/about_our_earth/all_publications/lpr_2016/ (accessed 28 August 2017).
- 4. Tom Batchelor, 'Trump "Will Definitely Pull Out of Paris Climate Change Deal", *The Independent*, 30 January 2017, http://www.independent.co.uk/news/world/americas/donald-trump-paris-climate-change-deal-myron-ebell-us-president-america-pull-out-agreement-a7553676. <a href="https://https:

- 5. See Undine Sellbach and Stephen Loo, 'Insects and Other Minute Perceptions in the Baroque House', in Hannah Starke and Jonathan Roffe (eds), *Deleuze and the Non/Human* (London: Palgrave Macmillan, 2015), pp. 103–21.
- 6. See the instagram feed of Olly and Suzi, https://www.instagram.com/ollysuzi/ (accessed 28 August 2017).
- 7. Discussed in Ron Broglio, *Surface Encounters: Thinking with Animals and Art* (Minneapolis: Minnesota University Press, 2011).
- 8. See Jacques Derrida, 'Heidegger's Hand: *Geschlecht* II', trans. John P. Leavey Jr. and Elizabeth Rottenberg, in Peggy Kamuf and Elizabeth G. Rottenberg (eds), *Psyche: Inventions of the Other*, vol. 2 (Stanford: Stanford University Press, 2008 [1987]), pp. 27–62.
- 9. Dawne McCance, *Critical Animal Studies: An Introduction* (Albany: State University of New York Press, 2013), pp. 4–5.
- 10. Limitrophy is developed across Derrida's work. See Lynn Turner, 'Insect Asides', in Turner (ed.), *The Animal Question in Deconstruction* (Edinburgh: Edinburgh University Press, 2013), pp. 54–69.
- 11. Jacques Derrida, *The Animal That Therefore I Am*, ed. Marie-Louise Mallet, trans. David Wills (New York: Fordham University Press, 2008), p. 31.
- 12. Concurrent with this *Companion*, Edinburgh also commissioned an introduction to the field one exhibiting a complexity indicative of the maturity and volume of scholarship to date. See Derek Ryan, *Animal Theory: A Critical Introduction* (Edinburgh: Edinburgh University Press, 2015).
- 13. Cary Wolfe advocated for this thoroughgoing necessity in 2003; see his *Animal Rites: American Culture*, the Discourse of Species, and Posthumanist Theory (Chicago: Chicago University Press, 2003), p. 7.
- 14. Derrida, Animal, p. 32.
- 15. See Jacques Derrida, "Eating Well" or the Calculation of the Subject', trans. Peter Connor and Avital Ronell, in Elizabeth Weber (ed.), *Points . . . Interviews 1974–1994* (Stanford: Stanford University Press, 1995 [1988]), p. 282.
- 16. Derrida, "Eating Well", p. 280.
- 17. David Wood, 'Thinking with Cats', in Matthew Calarco and Peter Atterton (eds), *Animal Philosophy: Essential Readings in Continental Thought* (London: Continuum, 2004), p. 132.
- 18. Wolfe's 'Posthumanities' series, published by Minnesota University Press, has not only published numerous North American scholars, but importantly it has included translations of works by European authors such as Jakob von Uexküll, Michel Serres, Elizabeth de Fontenay, Vinciane Despret, Vilem Flusser and Louis Bec.
- 19. Cary Wolfe, 'Introduction', in his *What is Posthumanism*? (Minneapolis: Minnesota University Press, 2010), p. xvi.
- 20. Ibid.
- 21. Prompted by such luminous publications as Myra J. Hird, *The Origins of Sociable Life: Evolution after Science Studies* (Basingstoke: Palgrave MacMillan, 2009) and Michael Marder, *Plant-Thinking: A Philosophy of Vegetal Life* (New York: Columbia University Press, 2013).
- 22. See Jan Zalasiewicz, Mark Williams, Will Stefen and Paul Cruzen, 'The New World of the Anthropocene' *Environment, Science and Technology* 44:7 (2010), pp. 2228–31.
- 23. Penn Bullock, 'Transcript: Donald Trump's Taped Comments about Women', *The New York Times*, 8 October 2016, https://www.nytimes.com/2016/10/08/us/donald-trump-tape-transcript.html (accessed 28 August 2017).
- 24. Carol Adams, *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory* (London: Bloomsbury, 2015 [1990]).
- 25. This is the conclusion of both Derrida and Adams. See Derrida, "Eating Well", p. 281; Adams, Sexual Politics, p. xix.

- 26. Emily Tamkin and Robert Gramer, 'The Women's March Heard Round the World', *Foreign Policy*, 21 January 2017, http://foreignpolicy.com/2017/01/21/the-womens-march-heard-round-the-world/ (accessed 28 August 2017).
- 27. "Pussyhat" Knitters Join Long Tradition of Crafty Activism', BBC News, 19 January 2017, http://www.bbc.co.uk/news/world-us-canada-38666373 (accessed 28 August 2017).
- 28. Meredith Wadman, 'USDA Blacks Out Animal Welfare Information', *American Association for the Advancement of Science*, 3 February 2017, http://www.sciencemag.org/news/2017/02/trump-administration-blacks-out-animal-welfare-information (accessed 28 August 2017).
- 29. This is looking bleak under the new presidency; see Associated Press in Washington, 'Dakota Access Pipeline: Appeals Court Refuses Tribes' Request to Stop Oil Flow', *The Guardian*, 18 March 2017, https://www.theguardian.com/us-news/2017/mar/18/dakota-access-pipeline-appeals-court-oil (accessed 28 August 2017). See also 'North Dakota's "Water Protectors" Bring Their Pipeline Story to Film', *Reuters*, 21 April 2017, http://www.reuters.com/article/us-filmfestival-tribeca-standingrock-idUSKBN17N1TK (accessed 28 August 2017).
- 30. According to Chris Finlayson, the minister for the treaty of Waitangi negotiations, the decision has brought the longest-running litigation in New Zealand's history to an end: 'Te Awa Tupua will have its own legal identity with all the corresponding rights, duties and liabilities of a legal person.' According to Eleanor Ainge Roy: 'The new status of the river means if someone abused or harmed it the law now sees no differentiation between harming the tribe or harming the river because they are one and the same.' See her 'New Zealand River Granted Same Legal Rights as Human Being', *The Guardian*, 16 March 2017, https://www.theguardian.com/world/2017/mar/16/new-zealand-river-granted-same-legal-rights-as-human-being (accessed 28 August 2017).
 - See also Michael Safi, 'Ganges and Yamuna Rivers Granted Same Legal Rights as Human Beings', *The Guardian*, 21 March 2017, https://www.theguardian.com/world/2017/mar/21/ganges-and-yamuna-rivers-granted-same-legal-rights-as-human-beings (accessed 28 August 2017).
- 31. Roy, 'New Zealand River Granted Same Legal Rights as Human Being'.
- 32. See Oxford Living Dictionaries, https://en.oxforddictionaries.com/definition/legal_person (accessed 28 August 2017).
- 33. Ibid.
- 34. See Paola Cavalieri and Peter Singer (eds), *The Great Ape Project: Equality Beyond Humanity* (New York: St Martin's Griffin, 1993) and the recent film *Unlocking the Cage*, dir. Chris Hegedus and D. A. Pennebaker (USA: HBO Documentary Films and Pennebaker Hegedus Films, 2016).
- 35. Philippe Pignarre and Isabelle Stengers, *Capitalist Sorcery: Breaking the Spell*, trans. Andrew Goffey (New York: Palgrave Macmillan, 2011).
- 36. Isabelle Stengers, *In Catastrophic Times: Resisting the Coming Barbarism*, trans. Andrew Goffey (London: Open Humanities Press, 2015).
- 37. Isabelle Stengers, 'Gaia, the Urgency to Think (and Feel)', in *Os Mil Nomes De Gaia*, https://osmilnomesdegaia.files.wordpress.com/2014/11/isabelle-stengers.pdf, p. 5 (accessed 28 August 2017).
- 38. Ibid.
- 39. Ibid. pp. 7-8.
- 40. Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham, NC: Duke University Press, 2016), p. 97. See also Donna J. Haraway, *Manifestly Haraway* (Minneapolis: Minnesota University Press, 2016), p. 261.
- 41. See Donna J. Haraway, *The Companion Species Manifesto: Dogs, People and Significant Otherness* (Chicago: Prickly Paradigm Press, 2003), p. 11, and Haraway, *Manifestly Haraway*, p. 211.

- 42. Haraway, Staying with the Trouble, p. 43.
- 43. Newton Harrison, quoted in Amanda Boetzkes, 'Techniques of Survival: The Harrisons and the Environmental Counterculture', in Elissa Auther and Adam Lerner (eds), West of Center: Art and the Counterculture Experiment in America, 1965–1977 (Minneapolis: University of Minnesota Press, 2011), pp. 306–23, p. 311.
- 44. Ibid
- 45. Leah Ollman, 'Environmental Warning as Art Exhibition: The Harrisons at Various Small Fires', *Los Angeles Times*, 17 February 2017, http://www.latimes.com/entertainment/arts/la-et-cm-newton-helen-harrison-review-20170217-htmlstory.html (accessed 28 August 2017).
- 46. In 2013 Australia added a new colour to its meteorological map to account for the then new level of extreme heat in some areas. At the time of writing most of the country has been coloured purple. See Narjas Zatat, 'It's So Hot in Australia That They've Had to Use Purple on Their Weather Maps', *Indy100*, 11 February 2017 https://www.indy100.com/article/australia-heatwave-boiling-colour-change-temperature-scale-7571241 (accessed 28 August 2017.)