

Special Issue of <u>Australian Journal of Environmental Education</u>

Critical Forest Studies: Seeding a new field from underground to overstory

Co-Guest Editors: David Rousell (RMIT), Cher Hill (Simon Fraser University), John Ryan (The University of Notre Dame AU), Mark Harvey (University of Auckland), Sarah Barns (RMIT), Jelena Aleksic (RMIT), Gideon Boadu (RMIT)

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o Email abstracts (300-400 words) to david.rousell@rmit.edu.au

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Aim of the Special Issue

Critical Forest Studies (CFS) is an emerging field of research dedicated to critical, creative, and relationally embedded practices with forests. As the first Special Issue dedicated to CFS, we invite contributions which gather the multiplicity of approaches emerging at the intersect of environmental education, Indigenous and decolonial studies, ecological philosophy, critical plant and animal studies, regenerative arts and design, more-than-human anthropologies and geographies, the new life sciences, critical posthumanities, and more.

In gathering these emerging perspectives, the Special Issue aims for a wild proliferation of "dispersals" (Lee, 2024) across different cultural, geographic, theoretical, and methodological locations. The co-editors are members and conveners of the Critical Forest Studies Collaboratory, an international collective dedicated to relational studies and custodianship of forests through the exchange of diverse knowledges of praxis and place. Founded in 2024, the Collaboratory has hosted a series of international 'wild seeding' events as well as an online 'digital planting' which gathers relational practices with forests from many different parts of the world (www.criticalforestlab.com). This call for papers grows from the work of the Collaboratory and extends its commitment to work that engages with forests through interspecies practices of regeneration, reciprocity, and reimagining.

From Underground to Overstory

We see the emergence of CFS as an open platform for theoretical and methodological approaches which take the elemental milieus of the forest as primordial gathering places for thought and inquiry. From soil and sky, wet and dry, root and shoot, shadow and light, microbiota and mycelia:

each of these distinct-yet-relational elements of the forest do not wait for humans to walk in and start categorising them. The forest is *already alive*, thinking, inquiring, learning and communicating in its own ways, on its own terms, in its own time. CFS starts here, by attending to cosmologies, knowledges, and lifeways already in various stages of germination, cultivation, and flourishing across different strata and milieus of the forest. From the subterranean depths of root and soil through to the towering heights of canopy and sky, CFS begins in the midst of the vegetal, fungal, animal, mineral, linguistic, historical, spiritual, and technical assemblages that populate these strata, in many cases inhabiting entirely different ecologies even within the same forest. As a "world where many worlds fit" (Blaser & de La Cadena, 2018; Escobar, 2018), the forest is always already a *pluriverse* where heterogeneous and even incommensurable forms of life co-exist. While rhizosphere and overstory cannot exist without each other, they nonetheless produce worlds which may be unfamiliar, even alien to one another, in terms of their evolutionary processes, historical inheritances, transmaterial compositions, and regenerative cycles of life and death. CFS aims to investigate the twisting lines of connection and mutuality across these different modes of existence.

The recognition of forests as sentient, interspecies learning communities is a key entry point for this work. Knowledge of the sentient dimensions of forests and how they co-compose with human feeling and thought is shared and practiced intergenerationally by First Peoples on sovereign and displaced homelands across the Earth (Harrison & McConchie, 2009; Kimmerer, 2013). These knowledge practices have developed over millennia in direct and consequential relationship with the places from which they emerge and with which they speak (Arnold et al, 2021). Indigenous scholarship has been crucial to increasing public awareness and understanding of forest sentience and relationality in recent years (Styres, 2018), as has the work of non-Indigenous scholars working in close reciprocal relationship with First Nations elders and cultural custodians (Hill et al., 2023).

CFS recognises that the ongoing settler colonial project of clearing lands entails a "genocide of relations" (Manning, 2023, p. 8). This genocide fractures and displaces regenerative understandings of forest life cultivated and honed through knowledges which recognise forest communities as sentient kin (Bawaka Country, 2023; Poelina et al., 2023; Saunders, 2021). Rousell and Tran (2024) describe this as a collision between incommensurable cosmologies of forest life. While settler cosmologies promote a separation of culture and ethics from land in a bid to legitimise a colonial logic of possession (Morton-Robinson, 2015), Indigenous cosmologies hold forest cultures together as a way of *belonging to the land* without need or desire to separate (Arnold et al, 2021).

The contested political ecology that emerges at the cultural interface of Indigenous, diasporic, and settler cosmologies is central to CFS and its engagement with related areas of multispecies inquiry (Nakata, 2007; Zanotti & Knowles, 2020). CFS builds on the flourishing of fields such as critical plant studies and the plant humanities over the past decade, both of which have opened new possibilities for critical, historical, artistic, performative, poetic, and philosophical modes of inquiry into human-plant relations (Di Paola, 2024; Driver & Cornish, 2021; Ryan, 2023; Stark, 2015). Central concerns animating critical plant studies include the ethical implications of agency, altruism, kinship, language, narrativity, and sentience in the botanical world (Karpouzou & Zampaki, 2024; Lawrence, 2022). The turn to plants aims to unsettle deep-seated biases towards vegetal beings as insentient, immobile, and inconsequential non-animals (Myers, 2015). Plant humanities scholars critique dominant

cultural narratives of flora as passive, promote consciousness of botanical diversity, and innovate methods of countering "plant disparity awareness" (Parsley et al., 2022).

More recently, interdisciplinary studies of mycelium have called for a fungal turn (Mackey & Sendur, 2024), noting tendencies to background the complex role of fungal and bacterial life while projecting humanistic ideals of altruism and beneficence onto plants (Sheldrake, 2020; Tsing, 2015). This corresponds with resounding calls within the United Nations Convention on Biological Diversity for funga to be formally recognised and protected alongside flora and fauna within global biodiversity and conservation frameworks. Hydrofeminism (Neimanis 2017; Shefer, et al., 2024), alongside broader movements associated with the 'blue humanities' (Alaimo, 2019; Mentz, 2023), has also brought awareness to how water circulates through forests as planetary weathermakers and climate stablisers. By refocusing attention on the transmaterial force and flow of water from underground to overstory, and through bodies of all kinds, turns to the hydrological trouble categorical distinctions between flora, fauna, and funga which have historically framed studies of forests in the sciences and humanities alike.

The emergence of 'smart forests' adds further complexity to this mix through the introduction of remote sensing technologies, automated decision-making, and robotics into sentient forest ecologies (Gabrys, 2020). These developments radically increase the physical and conceptual contact points between forests and emerging forms of digital sentience, interface design, and algorithmic experience (Gabrys, 2022; Gray, 2020), raising critical questions about the future of forest conservation and regeneration practices in an age of AI (Prebble et al., 2021). Indigenous scholarship offers crucial guidance in navigating critical questions relating to the initiation of digital sentient agents into more-than-human kinship circles associated with forest ecologies (Lewis et al., 2017). CFS embraces perspectives which grapple with the ontological newness of digital sentience in relation to far more ancient traditions of metaphysical kinship with forests, equally disrupting technophobic and techno-solutionist takes on smart forest imaginaries.

Areas of Regenerative Growth, Complexity, and Problematisation

Through this special issue, we aim to identify areas of inquiry which put emerging theories and practices of CFS into consequential relationship with environmental education. In beginning to tease out particular focus areas, we have drawn from the Collaboratory's 'wild seeding' events and Digital Planting (www.criticalforestlab.com) as an initial mapping of CFS as an emerging field. These have coalesced around *Forest Sentience, Forest Imaginaries, Forest Regeneration,* and *Forest Pedagogies* as areas of growth, complexity, and problematisation which CFS aims to contribute to.

Forest Sentience

Questions of forest sentience have occupied significant public attention in recent years as the phenomenon of the 'wood wide web' has inspired widespread engagement with forests and their sentient interconnectivities (Beiler et al., 1997; Macfarlane, 2016; Powers, 2019; Simard, 2021; Wild et al., 2020). Coined in 1997 by the editors of *Nature* to describe the research of forest ecologist Suzanne W. Simard and colleagues, the term refers to the underground communication networks mediated by mycorrhizae, symbiotic associations between plant roots and fungi. The root-soil interface, or rhizosphere, is a dynamic site of information transmission between plants, animals,

insects, fungi, humans, and other life forms. At the same time, symbiotic alliances with mycorrhizae supply plants with the energy required to undertake learning, memory, and other processes (Sheldrake, 2020).

Definitions of sentience vary across cosmologies, cultural histories, languages, and knowledge systems. For biologist Anthony Trewavas and colleagues (2020), sentience denotes any organism's particular mode of ecological awareness and relationality and underscores the capacity to experience, express, react, remember, and undertake intelligent behaviours. Myers (2015) cites work in evolutionary biology that "identifies cells as forms of 'selves' with minimal forms of 'sentience'" and proposes "any organism, single cell or otherwise, that can change itself in response to its environment, could be considered sentient" (p. 47). She applies this to the study of signal transduction in plants in an attempt to "open up a model of plant sentience that is grounded in the very sensitivity of plant tissues" (p. 48), and which recognises that "vegetal sensoria ... have unique sensibilities and transduce affects and sensations differently than animal or human bodies" (p. 49). Animistic cosmologies and traditions around the world further insist that sentience also carries theological, spiritual and metaphysical implications (cf Arnold et al., 2021; Bawaka Country, 2015; 2022), leading to complex questions about nonhuman personhood, ensoulment, poetic expression, and semiotics (Kohn, 2013; Viveiros de Castro, 2005). This raises the need for a critical, synthetic field like CFS to explore how diverse forms of sentience operate symphonically within forests as ecological societies, alongside broader social and pedagogical implications of the forest sentience for diverse publics. If critical plant studies has pursued a becoming-plant of the human, then perhaps CFS pursues a becoming-forest of thought.

Forest Imaginaries

Creative artists, writers, architects, and designers have become key agents in exploring the relationalities of forest sentience within differing social milieus and geographies of encounter. Forest imaginaries have emerged as an area of critical investigation for CFS which brings creative methods into contact with a range of social, scientific, philosophical, and community-based practices. Many artists and researchers in art-based practices are interested in enhancing the ecological sensibility of forests (Kravtsov & Höckert, 2022), including the linked dimensions of forest sentience, communication, and care. Creative investigations are exploring how forest ecosystems can inspire collective ecological imaginations as living breathing classrooms (Hay, 2024), as well as the role of ecological aesthetics and art-based practices of walking and drawing in building relational practices of care and multispecies learning (Vasko, 2021). Studies of forest imaginaries invite us to co-create with forests through multispecies collaborations that explore the possibilities of more-than-human creativity (Rousell, 2022). The symphonic orchestration of sentience in the forest can, in this sense, be understood as dynamic creative activity that is irreducible to any individual agent or species. CFS has a potentially significant role to play in extending traditional understandings of creative practices, media, and authorship through artful experiences that invite publics into creative encounters with the sentient forest.

Environmental artist and researcher Gisèle Trudel offers compelling examples in her project 'Mediane'. Engaging with forest ecosystems through research-creation methodologies, Trudel (2023) proposes "ecotechnologies of practice" as a creative framework for generating "dynamic craftings of relays and responses" between people, forests, and sensory technologies "from the middling of their

encounter" (np). This has led to an annual series of large-scale outdoor installations that open scientific, technological, artistic, and poetic investigations of forest sentience and communication to the public. The annual Forest of Imagination public program in Bath, UK also presents a significant example of engaging children and young people as co-creators of regenerative forest imaginaries at city-scale (Hay, 2024). These research-creation practices not only foster deeper understandings of sentient forest ecosystems, but also critically challenge anthropocentric perspectives, encouraging publics to consider forests and their wider techno-social milieus as collaborative partners in the construction of alternative forest imaginaries. By thinking, sensing, and engaging with forests through artful experiences, CFS invites artists and researchers to explore creative ways of understanding and relating to sentient forest environments, potentially leading to more relational and caring imaginaries of human-forest relationships.

Forest Regeneration

At the heart of the philosophical and artistic investigations we cite above is a commitment to embodied practice and the situated pragmatics of forest conservation and restoration. As noted in previous sections, the practicalities of forest conservation, regeneration, and care are inseparable from the cosmologies and lifeways of First Peoples as custodians of much of the Earth's remaining forest regions (Shelton et al., 2024). While theories and practices of 'rewilding' have gained traction since their introduction in the late 1990s, they also raise onto-political complexities regarding the nature of 'nature' and what counts as 'wild' from differing cultural and historical perspectives (Rose, 2002; Steele, 2020). Wynne et al (2020) describe rewilding as a framework aligned with "restorative practices promoting landscape fluidity, connectivity and non-equilibrium ecologies" which constitutes a radical break from Euro-Western conservation practices predicated on concepts of standardisation, management, and control (p. 71). Rewilding practices such as the Miyawaki 'tiny forest' method have been internationalised in recent years, creating new opportunities for communities to regrow local forests relatively quickly using evidence-based principles based on endemic biodiversity coefficients and soil conditioning (Miyawaki, 2004).

Wynne et al (2020) acknowledge the need for research into how rewilding practices can engender "a more substantive reworking of how we think and live with others", while accounting for "diverging views of wildness, naturalness and place" and associated "ethical and justice implications for both human-human and human-nonhuman relations" (p. 71). The recent Voices of the Future project investigated children and young people's relationships with forests and treescapes in very different urban and regional communities across the UK, opening further questions around the cultural and linguistic dimensions of forest restoration, citizen science, and rewilding practices from child and youth perspectives (Ambreen et al., 2023; 2024; Kraftl et al., 2024). CFS supports the development of justice-oriented frameworks for investigating the complexities of rewilding, regenerative design, and associated practices of reforestation and afforestation in diverse community settings. By generating nuanced frameworks that accommodate the complexities of more-than-human sentience and biocultural diversities, CFS looks to generate richly patterned and detailed stories of regenerative forest communities, languages, cultures, and pedagogies.

Forest Pedagogies

Critical forest-based pedagogies are informed by diverse theoretical foundations, including (but not limited to) place-based learning (Vladmirova, 2023), traditional wisdom and practice (Arnold et al.,

2021; Poelina et al., 2023), decolonial and anticolonial pedagogies (Nxumalo, 2019), posthuman imaginaries (Juke et al., 2022), plant humanities (Parmar et al., 2024), and immersive arts practices (Rousell, 2023). These educative foundations invite learners into critical, creative, and relationally embedded ways of knowing, doing, being, and becoming with forests. Pedagogically, the emerging field of CFS is deeply indebted to Indigenous histories and knowledge systems (cf Harrison & McConchie, 2009; Kimmerer, 2013). Within Indigenous worldviews, knowledge comes from the land (Styres, 2018) and cannot be separated from place. Forests house songs, stories, theories, histories, and languages. The aliveness of the land is understood as the foundation of human knowing (Donald, 2021; Slater, 2020; Watts, 2013), and more-than-human kin are recognised as teachers (Four Arrows et al., 2010; Simpson, 2017). As such, learning in, with, and from forests involves inquiring within multispecies collectives that requires something different from us. As we engage with a 300-year-old eucalyptus tree, for example, humancentric understandings of time, scales, rhythms, and communication morph and shift.

The Digital Planting (www.criticalforestlab.com) hosts variations of critical forest-based pedagogies that are embodied, sensory, holistic, haptic, creative, incorporeal, and relational. Interestingly, these pedagogies can also focus on various forms of speculative immersion in virtual or potential forests (Rousell & Caicedo-Penaloza, 2022), through digital technologies or gameplay for example, engaging learners in technically mediated imaginaries of forestscapes (Waeber et al., 2023). Critical forest-based pedagogies invite us to learn from forests who are flourishing, as well as from forests that are regenerating, disappeared, scorched, and flooded out, attending to the sedimented layers of colonial relations on these lands (Donald, 2009). Critical forest pedagogies can engage learners in issues of planetary wellness, histories of peoples and movements, complexities of life in forests, and the anthropocentric origins and perpetuation of the climate and biodiversity crises.

Importance of Critical Forest Studies for Environmental Education

As a field that has embraced transdisciplinarity and more-than-human relationality since its inception in the early 1970s, environmental education's (EE) current directions provide lively gathering places for the cultivation and dispersal of CFS as an emerging area of inquiry and creative practice. This is particularly evident in the robust development of critical posthumanist and postanthropocentric approaches flourishing in the intersections of EE and Indigenous studies (Poelina et al., 2023; Somerville, 2020), ecofeminism (Gough & Whitehouse, 2018), decolonial studies (Nxumalo, 2019), childhood studies (Vladimirova & Rautio, 2022), multispecies inquiry (Rautio et al., 2021), queer studies (Russell, 2021) and disability studies (Schmidt, 2023), amongst numerous other critical areas. CFS is already agitating in the zones where EE touches these other fields, particularly in spaces where the polyphonous qualities of forest sense and sensation are actively acknowledged and investigated (cf Parmar et al., 2024). CFS also provides a significant platform to support the transition from EE, as generally defined, toward more targeted and specified fields such as climate change education or CCE (Stevenson, Nicholls, & Whitehouse, 2017). CFS underscores the potential of forest sentience, regeneration, imaginaries and pedagogies to transform EE in response to planetary climate disruption and arboreal diversity loss (Stroud et al., 2022). Approaching forests from CFS perspectives can mitigate destructive environmental practices and paradigms while reframing forests as pluralistic, sentient societies with whom humankind can interrelate, communicate and collaborate.

What CFS can offer that may be new and useful in such spaces are frameworks for attending to the symphonic orchestration of sentient perspectives which are primarily opaque to one another, yet nonetheless connected by metaphysical threads which cannot be explained by existing scientific models (McKittrick, 2020; Stengers, 2018). In this regard, CFS calls for a reopening of questions relating to eco-evolutionary development and improvised structures of possibility arising from aleatory encounters between radically different forms of sentient life (Goodman, 2022). Bridging CFS into EE and CCE has the potential to introduce unforeseen transformations of how life, sentience, relationality, and care are understood, practiced, and shared across generations. This, in turn, opens up fruitful domains for enquiry and practices across the domains of EE, CCE, and related fields.

The very act of breathing underscores our indissoluble oneness with forests as sources of nourishment, healing, learning, beauty, pleasure, and spiritual awakening. As Kimmerer (2013) shares, from an Indigenous standpoint humans are the "younger brothers of Creation" (p. 347) with land (Styres, 2011) and Country (Fricker, 2024) being the first teachers. We invite contributions that elaborate diverse practices of forest communication, relationality, ethicality, and social organisation that exceed humancentric understandings and ask something different of us. Experiences within forestscapes, whether actual or virtual, create openings for multispecies learning, healing, and creating. Help us build CFS as a field which thrives in the symphonic complexities of sentient difference and dispersed agency to inspire novel responses to our planetary emergency.

References

- Ambreen, S., Badwan, K., & Pahl, K. (2023). Trees and us: learning about/from trees and treescapes from primary school children in the United Kingdom. *Occasional Paper Series*, 2023(50), 30-38.
- Ambreen, S., Badwan, K., & Pahl, K. (2024). Attending to children's voices within environmental education. *Childhood*.
- Amprazis, A., & Papadopoulou, P. (2024). Plant awareness: At the dawn of a new era. *Journal of Biological Education*, 1-11.
- Arnold, C., Atchison, J., & McKnight, A. (2021). Reciprocal relationships with trees: Rekindling Indigenous wellbeing and identity through the Yuin ontology of oneness. *Australian Geographer*, 52(2), 131–147.
- Arnold, C., Atchison, J., & McKnight, A. (2023). Often in between: Thinking through research methods and Indigenous sovereignty with Yuin Country. *Environment and Planning F*, 2(1-2), 163–179.
- Bawaka Country, including Burarrwanga, L., Ganambarr, R., Ganambarr-Stubbs, M., Ganambarr, B., Maymuru, D., & Daley, L. (2022). Songspirals bring country into existence: Singing more-than-human and relational creativity. *Qualitative Inquiry*.
- Bawaka Country, Wright, S., Suchet-Pearson, S., Lloyd, K., Burarrwanga, L., Ganambarr, R., Ganambarr-Stubbs, M., Ganambarr, B., Maymuru, D., Sweeney, J. (2016). Co-becoming Bawaka: Towards a relational understanding of place/ space. *Progress in Human Geography*, 40(4), 455–475.
- Beiler, K.J., Durall, D.M., Simard, S.W., Maxwell, S.A., & Kretzer, A.M. (2010). Architecture of the wood-wide web: Rhizopogon spp. genets link multiple Douglas-fir cohorts. *New Phytologist*, 185(2), 543–553.
- Blaser, M., & De La Cadena, M. (2018). A world of many worlds. Duke University Press.

- Colombo, G., & Gray, J. W. (2024). Un-indexing forest media: repurposing search query results to reconsider forest-society relations. *Cultural Geographies*, 31(4), 569-576.
- Di Paola, M. (Ed.) (2024). The vegetal turn: History, concepts, applications. Springer.
- Donald, D. (2021). We need a new story: Walking and the wahkohtowin imagination.
- Journal of the Canadian Association for Curriculum Studies, 18(2), 53-63.
- Donald, D. (2012). Forts, colonial frontier logics, and Aboriginal-Canadian relations:
- Imagining decolonizing educational philosophies in Canadian contexts. In Ali A. Abdi (Ed.), Decolonizing philosophies of education (pp. 91–111). Sense Publishers.
- Driver, F., & Cornish, C. (2021). Plant humanities: Where arts, humanities, and plants meet. *TEA: The Ethnobotanical Assembly*, 8.
- Escobar, A. (2018). *Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds*. Duke University Press.
- Four Arrows, London Jacobs, J. & Sage, R. (2010). Anthropocentrism's antidote: Reclaiming our Indigenous orientation to non-human teachers. Critical Education, 1(3).
- Fricker, A. (2024). Planetary Justice and Decolonizing Pedagogy: Teaching and Learning in Solidarity with Country. In *Planetary Justice* (pp. 163-177). Bristol University Press.
- Gabrys, J. (2020). Smart forests and data practices: From the Internet of Trees to planetary governance. Big Data & Society, 7(1).
- Gabrys, J. (2022). Programming nature as infrastructure in the smart forest city. *Journal of Urban Technology*, 29(1), 13–19.
- Goodman, A. (2022). Thinking Fungally: Ecological Modes of Thought. *Entheogenesis Australia Journal*.
- Gough, A., & Whitehouse, H. (2018). New vintages and new bottles: The "Nature" of environmental education from new material feminist and ecofeminist viewpoints. *The Journal of Environmental Education*, 49(4), 336–349.
- Gray, J. (2020). The datafication of forests? From the wood wide web to the internet of trees. *Critical zones: The science and politics of landing on earth*, 362-9.
- Harrison, M.D., & McConchie, P. (2009). *My people's dreaming: An Aboriginal elder speaks on life, land, spirit and forgiveness.* Finch Publishing.
- Hay, P. (2024). Creative Pedagogies: School Without Walls and Forest of Imagination. *Int J Art Des Educ*, 43: 396-414.
- Hill, C, Whintors, N. & Bailey, R. (2023). We are the Salmon Family: Inviting reciprocal and respectful pedagogical encounters with the Land. *Engaged Scholar Journal. 8,* (4), 1-22.
- Jukes, S., Stewart, A., & Morse, M. (2022). Following lines in the landscape: Playing with a posthuman pedagogy in outdoor environmental education. Australian Journal of Environmental Education, 38(3-4), 345-360.
- Jukes, S., Stewart, A., & Morse, M. (2023). Learning landscapes through technology and movement: Blurring boundaries for a more-than-human pedagogy. *Journal of Adventure Education and Outdoor Learning*, 1–18.
- Jukes, S. (2023). Learning to confront ecological precarity: Engaging with more-than-human worlds. Springer Nature.
- Karpouzou, P., & Zampaki, N. (2024). Critical Green Theories and Botanical Imaginaries: Exploring Human and More-than-Human World Entanglements. *Open Cultural Studies*, 8(1), 20240038.
- Kimmerer, R.W. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge, and the teachings of plants.* Milkweed Press.

- Kohn, E. (2013). *How forests think: Toward an anthropology beyond the human.* University of California Press.
- Kraftl, P., Ambreen, S., Armson, D., Badwan, K., Curtis, E., Pahl, K., & Schofield, J. E. (2024). Starting with trees: Between and beyond environmental education. *British Educational Research Journal*.
- Kravtsov, T, and Höckert, E. (2022). Northern Forest Memories: Sensing Arctic Nature Through Creative Practice with Clay. In *Relate North #9* (pp. 172-190). InSEA Publications.
- Lee, J. J. (2024). Dispersals: On Plants, Borders, and Belonging. Penguin.
- Lawrence, A.M. (2022). Listening to plants: Conversations between critical plant studies and vegetal geography. *Progress in Human Geography*, 46(2), 629–651.
- Lewis, J. E., Arista, N., Pechawis, A., & Kite, S. (2018). Making kin with the machines. *Journal of Design and Science*.
- Macfarlane, R. (2016). The secrets of the wood wide web. The New Yorker, 7.
- Manning, E. (2023). Out of the clear. Minor Compositions.
- Marder, M. (2013). Plant-thinking: A philosophy of vegetal life. Columbia University Press.
- McKittrick, K. (2020). Dear science and other stories. Duke University Press.
- Miyawaki, A. (2004). Restoration of living environment based on vegetation ecology: theory and practice. *Ecological Research*, 19, 83-90.
- Myers, N. (2015). Conversations on plant sensing: Notes from the field. *NatureCulture*, 3, 35–66.
- Myers, N. (2017). From the Anthropocene to the Planthroposcene: Designing gardens for plant/people involution. *History and Anthropology*, 28(3), 297–301.
- Myers, N. (2020). Becoming sensor in sentient worlds: A more-than-natural history of a black oak savannah. In *Between matter and method* (pp. 73–96). Routledge.
- Nakata, M. (2007). The cultural interface. *The Australian Journal of Indigenous Education*, *36*(S1), 7-14.
- Neimanis, A. (2017). Bodies of water: posthuman feminist phenomenology. Bloomsbury Academic.
- Nxumalo, F. (2019). Decolonizing place in early childhood education. Routledge.
- Parmar, S., Malone, K., & Young, T. C. (2024). Planty childhoods: Theorising with a vegetal ontology in environmental education research. *Australian Journal of Environmental Education*, 40(2), 243-257.
- Parsley, K., Daigle, B., Sabel, J., & Nehm, R. (2022). Initial development and validation of the plant awareness disparity index. *CBE Life Sciences Education*, 21(4), 1–14.
- Poelina, A., Paradies, Y., Wooltorton, S., Guimond, L., Jackson-Barrett, L., & Blaise, M. (2023). Indigenous philosophy in environmental education. *Australian Journal of Environmental Education*, 39(3), 269–278.
- Poelina, A., Wooltorton, S., Blaise, M., Aniere, C.L., Horwitz, P., White, P.J., & Muecke, S. (2022). Regeneration time: Ancient wisdom for planetary wellbeing. *Australian Journal of Environmental Education*, 38(3-4), 1–18.
- Powers, R. (2018). The overstory: A novel. WW Norton & Company.
- Prebble, S., McLean, J., & Houston, D. (2021). Smart urban forests: An overview of more-than-human and more-than-real urban forest management in Australian cities. *Digital Geography and Society*, 2, 100013.
- Rautio, P., Tammi, T., & Hohti, R. (2021). Children after the animal turn: Child—animal relations and multispecies scholarship. *The SAGE handbook of global childhoods*, 1, 341-352.

- Reason, P. (2024). Extending co-operative inquiry beyond the human: Ontopoetic inquiry with rivers. *Action Research*, 22(2), 114-134.
- Rose, D.B. (2002). Indigenous ecologies and an ethic of connection. In *Global ethics and environment* (pp. 175–187). Routledge.
- Rousell, D., & Penaloza-Caicedo, A. (2022). Listening for futures along Birrarung Marr: Speculative immersive experience in environmental education. *Australian Journal of Environmental Education*, 38(3-4), 431–450.
- Rousell, D., & Tran, J. (2024). Thinking with Forests as Sentient Societies: Towards a Pedagogy and Ethic of Immanent Care. *Australian Journal of Environmental Education*, 40(2), 258-275.
- Rousell, D. (2022). Accidental Creatures: Whitehead's Creativity and the Clashing Intensities of More-Than-Human Life. *Qualitative Inquiry*, 28(5), 566-577.
- Rousell, D. (2023). Weaving the pluriverse: Childhood encounters with the underground worlds of Birrarung Marr. *Children's Geographies*.
- Rowe, A.C., & Tuck, E. (2017). Settler colonialism and cultural studies: Ongoing settlement, cultural production, and resistance. *Cultural Studies* ↔ *Critical Methodologies*, 17(1), 3–13.
- Russell, J. (Ed.). (2021). *Queer ecopedagogies: Explorations in nature, sexuality, and education.*Springer Nature.
- Ryan, J.C. (2023). Passive flora? Reconsidering nature's agency through human-plant studies. In S. Osterhoudt & K. Sivaramakrishnan (Eds.), *Sustaining natures: An environmental anthropology reader* (pp. 277–305). University of Washington Press.
- Schmidt, J. (2023). Cripping environmental education: rethinking disability, nature, and interdependent futures. *Australian Journal of Environmental Education*, 39(2), 251-268.
- Sheldrake, M. (2021). Entangled life: How fungi make our worlds, change our minds, and shape our futures. Random House.
- Simard, S. (2021). Finding the mother tree: Uncovering the wisdom and intelligence of the forest. Penguin UK.
- Simard, S., Perry, D, Jones, M., Myrold, D., Durall, D., & Molinak, R. (1997). Net transfer of carbon between ectomycorrhizal tree species in the field. *Nature* 388(6642), 579–82.
- Simpson, L.B. (2017). *As we have always done: Indigenous freedom through radical resistance.*University of Minnesota Press.
- Slater, L. (2021). Learning to stand with Gyack: A practice of thinking with non-innocent care. *Australian Feminist Studies*, 36(108), 200–211.
- Shefer, T, Bozalek, V, Romano, N, & Neimanis, A. (2024). *Hydrofeminist Thinking with Oceans: Political and Scholarly Possibilities*. Routledge.
- Shelton, M. R., Kanowski, P. J., Kleinschmit, D., & Ison, R. L. (2024). Critical social perspectives in forest and landscape restoration—a systematic review. *Frontiers in Environmental Science*, *12*, 1466758.
- Somerville, M. (2020). *Riverlands of the Anthropocene: Walking our waterways as places of becoming.* Routledge.
- Stark, H. (2015). Deleuze and critical plant studies. In *Deleuze and the Non/human* (pp. 180-196). London: Palgrave Macmillan UK.
- Steele, W. (2020). Planning wild cities: Human–nature relationships in the urban age. Routledge.
- Stengers, S. (2018). *Another science is possible: A manifesto for slow science* (S. Muecke, Trans.). Polity Press.

- Stevenson, R. B., Nicholls, J., & Whitehouse, H. (2017). What is climate change education?. *Curriculum perspectives*, *37*, 67-71.
- Stroud, S., Fennell, M., Mitchley, J., Lydon, S., Peacock, J., & Bacon, K. L. (2022). The botanical education extinction and the fall of plant awareness. *Ecology and Evolution*, 12(7).
- Styres, S. D. (2011). Land as first teacher: A philosophical journeying. *Reflective Practice*, 12(6), 717-731.
- Styres, S. (2018). Literacies of land: Decolonizing narratives, storying and literature. In L. Tuhiwai Smith, E. Tuck, & K. W. Yang (Eds). *Indigenous and decolonizing studies in education mapping the long view* (pp. 24-37). Routledge.
- Trewavas, A., Baluška, F., Mancuso, S., & Calvo, P. (2020). Consciousness facilitates plant behavior. *Trends in Plant Science*, 25, 216–217.
- Trudel, G. (2023) Ecotechnologies of Practice: in-forming changing climates. ISEA2023 SYMBIOSIS, 210-214.
- Tsing, A. L. (2015). *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins.* Princeton University Press.
- Tuck, E., & McKenzie, M. (2014). Place in research: Theory, methodology, and methods. Routledge.
- Vasko, Z. (2021). Visiting, attending and receiving: Making kin with local woods. *International Journal for Education through Art*, 17 (1) 45-53.
- Viveiros de Castro, E. (1998). Cosmological Deixis and Amerindian perspectivism. *The Journal of the Royal Anthropological Institute*, 4(3), 469–488.
- Viveiros de Castro, E. (2005). Perspectivism and multinaturalism in Indigenous America. In A. Surralles & P.G. Hierro (Eds.), *The land within: Indigenous territory and perception of the environment* (pp. 36–75). International Work Group for Indigenous Affairs.
- Vladimirova, A., & Rautio, P. (2020). Unplanning research with a curious practice methodology: Emergence of childrenforest in the context of Finland. *Research handbook on childhoodnature: Assemblages of childhood and nature research*, 335-360.
- Vladimirova, A. (2023). Treat me as a place: On the (onto) ethics of place-responsive pedagogy. *Educational Philosophy and Theory*, 55(11), 1268-1284.
- Waeber, P. O., Melnykovych, M., Riegel, E., Chongong, L. V., Lloren, R., Raher, J., ... & Garcia, C. A. (2023). Fostering innovation, transition, and the reconstruction of forestry: critical thinking and transdisciplinarity in forest education with strategy games. *Forests*, 14(8), 1646.
- Watts, V. (2013). Indigenous Place-Thought and agency amongst humans and non humans (First Woman and Sky Woman go on a European world tour!). *Decolonization: Indigeneity, Education & Society*, 2(1), 20-34.
- Whyte, K.P., & Cuomo, C.J. (2016). Ethics of caring in environmental ethics: Indigenous and feminist philosophies. In A. Thompson (Eds.), *The Oxford handbook of environmental ethics* (pp. 234).
- Wild, A., Reed, A., Barr, B., & Crocetti, G. (2020). *The forest in the tree: How fungi shape the earth.* CSIRO.
- Wynne-Jones, S., Clancy, C., Holmes, G., O'Mahony, K., & Ward, K. J. (2020). Feral political ecologies? The biopolitics, temporalities and spatialities of rewilding. *Conservation and Society*, 18(2), 71-76.
- Zanotti, L., & Knowles, N. (2020). Large intact forest landscapes and inclusive conservation: A political ecological perspective. *Journal of Political Ecology*, *27*(1), 539-557.