

Grappling with ‘nature’ in Australian home gardens 1890-1960

Andrea Gaynor

History, The University of Western Australia

Abstract

The period from 1890 to 1960 in Australia, as elsewhere, is widely acknowledged as pivotal in the development of modernity, involving increasing urbanisation, commodification, nationalism, state power, bureaucratisation, occupational specialisation, technocratic thinking and faith in science. This era ushered in a vastly expanded state infrastructure for environmental management, and saw the rise and fall of progressive conservation activism, as well as precursors to the popular environmentalism emerging in the 1960s. Little, however, is known of how typical middle- and working-class residents of Australian cities and towns understood nature in this period, and how their understandings may have changed in the face of such far-reaching developments. A focus on relationships between people, plants and invertebrates in home garden settings provides one window onto this issue, providing evidence of how those who gardened negotiated a more or less self-conscious engagement with ‘nature’ in a domestic setting. Close examination of texts produced by and for gardeners suggests that while the dominant social construction of the relationship between nature and humans increasingly emphasised human autonomy and control, the embodied experience of home gardening gave rise to diverse understandings. The sense of control and independence that many gardeners had come to expect by the 1950s was challenged by the enduring autonomy of nature, and many gardeners accepted the limitations of their control. Home gardening

thus both reflected and challenged prevailing modernist ideas about emancipation from nature.

‘Will you please inform me as to the cause of Paeonies not flowering? I have tried them in various positions and given them manures of different kinds, but all I can get is a weak growth of leaves and no flowers’¹

‘Exasperated’, 1935

‘What all gardens have in common is that they are a cultural product’²

Gaynor Macdonald, 2016

The humanities and social sciences are, at heart, concerned with people – their thoughts, practices, relationships. So it is unsurprising that scholars working in this area have focused on gardens as humanised spaces, and usefully illuminated the social and cultural processes that have operated within them. However, it is important to also pay close attention to the materiality and vitality of gardens. Requiring particular environmental conditions and processes as well as a suite of more-or-less tractable organisms to bring a gardener’s vision to fruition, gardens are undeniably hybrid sites, co-productions of humans, their technologies, environmental processes and non-human organisms (that is, people, things and what in the West we tend to identify as ‘nature’). Indeed, gardening

¹ ‘Exasperated’, ‘Paeonies’ [letter to the editor], *Home Gardener*, 1 Jan. 1935, 16.

² Gaynor Macdonald, ‘Gardens, Landscapes, Wilderness: Ways of Seeing Ourselves’, in Gretchen Poiner and Sybil Jack (eds.), *Gardens of History and Imagination: Growing New South Wales* (Sydney: Sydney University Press, 2016), p.15.

may be conceptualised as a network of relationships between and among humans and nature involving various forms of response and control, connection and autonomy. At a time when relationships between human and non-human are under increasing pressure, it is worth bringing this ‘more-than-human’ perspective to bear on garden histories.³

Early garden histories tended to focus on the creation of the grand gardens of rural and urban elites, though the rise of social history saw the emergence in the 1980s of studies tracing the historical contours and consequences of home gardening.⁴ In the decades since, historians in Australia and elsewhere have demonstrated the importance of gardens as sites of identity formation linked to contemporary discourses around gender, class, empire and nation.⁵ The lawn, as a principal element of post-war gardens, has been a focus of critical historiography in the U.S.A.: Kenneth Jackson has shown how in the mid-nineteenth century lawnsapes, as ‘aesthetic and moral nature’, became a key component of the Anglo suburban ideal,⁶ while Virginia Scott Jenkins and Ted Steinberg have produced more detailed origin stories of American lawn, revolving around cultural and institutional factors.⁷ Others have examined the power relations implicit in American lawns, including those between humans and ‘nature’. In his influential 1989 essay Michael Pollan portrays lawns as ‘nature under totalitarian rule’: both a symptom of and a

³ Sarah Whatmore, *Hybrid Geographies: Natures, Cultures, Spaces* (London: Sage, 2002).

⁴ See, for example, Stephen Constantine, ‘Amateur Gardening and Popular Recreation in the 19th and 20th centuries’, *Journal of Social History* 14, no. 3 (1981): 387-406.

⁵ See, for example, Georgiana Whitehead (ed.), *Planting the Nation* (Melbourne: Australian Garden History Society, 2001); Katie Holmes, Susan K. Martin and Kylie Mirmohamadi, *Reading the Garden: The Settlement of Australia* (Carlton, Vic: Melbourne University Publishing, 2008); James John Beattie, ‘Making Home, Making Identity: Asian Garden Making in New Zealand, 1850s–1930s’, *Studies in the History of Gardens & Designed Landscapes* 31, no. 2 (2011): 139-159; Andrea Gaynor, ‘Animal Husbandry and House Wifery? Gender and Suburban Household Food Production in Perth and Melbourne, 1890-1950’, *Australian Historical Studies* 36, no. 124 (2004): 238-254.

⁶ Kenneth Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985), pp. 54-60.

⁷ Virginia Scott Jenkins, *The Lawn: A History of an American Obsession* (Washington, D.C.: Smithsonian Institution Press: 1994); Theodore Steinberg, *American Green: The Obsessive Quest for the Perfect Lawn* (New York: W.W. Norton, 2006), pp. 18-24.

metaphor for Americans' relationship with nature more generally.⁸ Alexander Wilson similarly portrays the lawn-centred post-war suburban garden as a site of human domination and containment of nature, though sees in late 20th century wild, native and 'natural' gardens the potential for re-emergence of a more reciprocal, 'pre-modern' relationship with nature.⁹

In all of these studies the focus has been on the broader social and cultural processes driving gardeners' changing visions and aspirations, as well as the satisfaction they derive from their gardening—that is, the 'why' of gardening, accounted for in terms of culture, power, economy. One notable exception is Paul Robbins' account of the creation of 'lawn people' to serve political, economic and ecological imperatives, including those of the turf itself: here nature is granted more agency.¹⁰ Other garden histories have richly described the 'how' of gardening – the changing tools, techniques and materials employed by gardeners.¹¹ However, none have interrogated whether or how the changing ways of 'doing' gardening in shifting ecological, technological and social contexts might have shaped individual and collective perspectives on nature.

This is a useful line of inquiry, as perceptions are not principally shaped by external ideas and cultural frameworks but by bodily engagement and practices of 'dwelling' in place. Tim Ingold contends that rather than being autonomous individuals whose mind consistently shape actions, humans are always immersed 'in an active,

⁸ Michael Pollan, 'Why Mow? The Case Against Lawns', *The New York Times Magazine*, 28 May 1989, accessed June 2, 2015, <http://www.nytimes.com/1989/05/28/magazine/why-mow-the-case-against-lawns.html>.

⁹ Alexander Wilson, *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez* (Toronto: Between the Lines, 1991), chapter 3.

¹⁰ Paul Robbins, *Lawn People: How Grasses, Weeds, and Chemicals Make Us Who We Are* (Philadelphia: Temple University Press, 2012).

¹¹ See for example Trevor Nottle, *Endless Pleasure: Exploring and Collecting Among the Byways of Gardens and Gardening* (Mile End: Wakefield Press, 2015).

practical and perceptual engagement with constituents of the dwelt in world'.¹² What people *do* in particular environments shapes their capacity for acting in and formulating ideas about the world. It follows that in gardens we can witness how quotidian, embodied interactions between humans and nature have worked to produce particular understandings of nature and culture, in the context of broader processes of social and ecological modernisation. Garden environments have played a significant role in the 'dwelt-in world' of many people in different contexts. For example, George Seddon, perhaps with only a little exaggeration, pointed out that late-20th-century Australian gardens took up around half of the land in areas where around 80% of people lived.¹³ Furthermore, unlike the indoor domestic nature of, say, kitchen mice and clothes moths, gardens opened up possibilities for reciprocal and productive as well as adversarial relationships. What people have done and experienced in gardens therefore must be considered in any attempt to understand change and continuity in how the more-than-human world has been encountered, negotiated and understood.

The 'material turn' in the social sciences has produced a handful of studies adopting this kind of perspective on gardens, mostly from geographers. Mark Bhatti and Andrew Church (2001) used British domestic gardens as sites in which to examine how everyday practices and routines have fashioned human relations with nature. Their empirical analysis of survey data demonstrated that while the meaning of gardens was shaped by broader cultural and social processes, gardens were also spaces in which individuals developed 'complex, sensual and personalised readings of nature', often based on association with friends and family.¹⁴ Building on this work Russell Hitchings,

¹² Tim Ingold, *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (London: Routledge, 2000), p. 42.

¹³ George Seddon, 'The Garden as Paradise', *Australian Garden History* 8 (1997): 8-12.

¹⁴ Mark Bhatti and Andrew Church, 'Cultivating Natures: Homes and Gardens in Late Modernity', *Sociology* 35, no. 2 (2001): 380.

in an actor-network influenced ethnographic study of contemporary British gardening, emphasised the variability and contingency of human-nonhuman relations in gardens, finding that the status of garden and gardener oscillated between ‘the performer and the stagehand.’¹⁵ Also in the British context, Franklin Ginn has characterised gardening as a never-finished engagement with nonhumans, involving ‘corporeal, emotional and physical interactions’ but also deeply shaped by personal and public histories and an ‘anticipatory regard’ for the future.¹⁶ While Ginn’s gardeners – and gardens - are historically-contextualised, a tension sometimes arises between the nuanced and theoretically-informed interpretation of contemporary gardening and a more summary treatment of gardens past. For example, Ginn notes that ‘even though they wield skill and power in weaving life together in the garden, gardeners are not in charge’. This uncertainty underpins gardening’s skill and pleasure, yet seems denied to past gardeners by Ginn’s depiction of the pre-1990s garden as ‘a space of autarchic control and chemical command’.¹⁷

Emma Power, also adopting an actor-network perspective to examine how gardeners understand and are shaped by the presence of non-humans, used interviews and popular publications to study relations between human and non-human in contemporary Australia. Where Hitchins portrays gardening as a harmonious more-than-human enterprise, Power emphasises the diversity of relationships between human and non-human actors in garden settings, including competition, challenge, collaboration and negotiation. Moreover, she calls for recognition of ‘the active role that non-humans play in structuring garden relations’.¹⁸ Also in an Australian context, Lesley Head and Pat

¹⁵ Russell Hitchings, ‘People, Plants and Performance: On Actor Network Theory and the Material Pleasures of the Private Garden’, *Social & Cultural Geography* 4, no. 1 (2003): 99-114.

¹⁶ Franklin Ginn, *Domestic Wild: Memory, Nature and Gardening in Suburbia* (London: Routledge, 2017).

¹⁷ Ginn, *Domestic Wild*, pp.112, 131.

¹⁸ Emma R. Power, ‘Human–Nature Relations in Suburban Gardens’, *Australian Geographer* 36, no.1

Muir's ethnographic study of domestic gardens revealed that while some garden practices reinforced a clear separation between nature and culture in the minds (as well as lives) of their subjects, the diverse everyday engagements with a lively nature in a backyard setting often contributed to the undoing of a separationist stance:

Across the spectrum of attitude and practice, separation and purification are most disrupted in everyday situations of close interaction with and observation of the non-human world, when backyarders engage with the agency of weeds, birds, water and self-seeded shrubs, among others.¹⁹

These studies provide a valuable corrective to the accounts of gardening that have dominated the literature to date, which largely ignore the material role and agency of non-humans in gardens. However, they are limited by their more-or-less synchronic perspectives on more-than-human relations within garden spaces, which appear timeless, or confined to the late 20th and early 21st century. Though its attractions are enduring, gardening is not a timeless activity, but intricately linked to its changing social, technological and ecological contexts.

The period from 1890 to 1960 in Australia, as elsewhere, is widely acknowledged as pivotal in the development of modernity, involving increasing urbanisation, commodification, nationalism, state power, bureaucratisation, occupational specialisation, technocratic thinking and faith in science. This era ushered in a vastly expanded state infrastructure for environmental management and saw the rise and fall of progressive conservation activism, as well as precursors to the popular environmentalism emerging in the late 1960s. We know little, however, of how typical middle- and working-class

(2005): 51.

¹⁹ Lesley Head and Pat Muir, 'Suburban Life and the Boundaries of Nature: Resilience and Rupture in Australian Backyard Gardens', *Transactions of the Institute of British Geographers*, n.s., 31, no. 4 (2006): 505-524.

residents of Australian cities and towns understood nature in this period, or how their understandings may have changed in the face of such far-reaching developments.

Prior to the mid-19th century the prevailing Anglo view of nature ‘was one of fatalistic balance’: of limits to human manipulation and the contingency of human victories over it.²⁰ While scientists and improvers from early modern times had contested this interpretation, from about the 1860s it was increasingly assailed by a modernist ethos that saw nature as eminently controllable through scientific knowledge. This shift was broadly contemporaneous with the rise of what Richie Nimmo describes as ‘that powerful myth at the heart of modernity of a uniquely human realm, above and beyond ‘nature’, a sanctified domain, apparently given, but in fact perpetually carved out in discourse and practice.’²¹ This humanist conceit, argues Nimmo, was constituted through knowledges and practices such as veterinary pathology and sanitary engineering, which sought to define and police the boundaries between human and non-human. But were these kinds of discourses and practices also found in home gardens, or did the diverse and often disorderly interaction of human and non-human in those domestic spaces challenge the modernist conceit?

Considering those modernist institutions involved in the transformation of Australian home gardening in this period, two stand out as particularly relevant. Firstly, the departments of agriculture, established in each of the Australian colonies in the late 19th century, employed entomologists and horticultural experts. Their primary role was to provide technical support for the industrialisation of agriculture and horticulture within a context of globalising markets. Through magazines, books, newspapers and public talks, staff of the various Departments of Agriculture also offered advice to home gardeners. In

²⁰ Richie Nimmo, *Milk, Modernity and the Making of the Human: Purifying the Social* (Hoboken: Taylor and Francis, 2010), p. 75.

²¹ Nimmo, *Milk, Modernity and the Making of the Human*, p. 92.

doing so, they acted as knowledge brokers connecting the expanding realm of agricultural and horticultural science with the home garden. Along with horticultural retailers, they provided guidance on the use of horticultural technologies, including pesticides and fertilisers, but also highlighted, for example, the valuable role played by soil organisms such as fungi and bacteria in maintaining plant health. Secondly, the growing horticultural retail industry represents gardening's growing commercialisation, which over this period provided an increasing variety and amount of material inputs for home gardening, such as fertilisers, pesticides, seeds, and containerised plants. Through promotion and sales the retailers facilitated the proliferation of gardening devices and materials used in home gardens. They were key sources of gardening knowledge and practices, many of which sought to elevate the gardener above garden 'nature'. Success, however, was not always assured.

Modernity also had its discontents. Across both imperial centres and industrialising colonies in this period, we see evidence of an essentially romantic desire to re-animate and re-enchant 'nature' and seek connection with it. This found expression, for example, in increasing reservation of bushland and other 'wilderness' sites for urban leisure-seekers. This romantic nature-seeking, while anthropocentric, was less interested in preservation of a separate and sanctified human realm: while not entirely committed to dissolving boundaries between human and non-human (and arguably committed to the purification of a separate realm for 'nature'), it was less invested in reproducing human separation from and dominance over nature.

Using narratives produced by home gardeners, and an empathetic historical imagination to place their actions in context, we can begin to guess at how various human approaches to gardening played out and changed over time, as diverse actors operated in cooperation and sometimes in conflict in gardens. While this kind of approach cannot

quantify trends or achieve the level of detail of more recent studies based on interview, survey and participant observation data, it can sketch out some indicative and often overlooked human perspectives, while taking seriously the materiality of the garden itself.

A wide range of elements come together to make domestic gardens—from invertebrates, fungi and microorganisms to sprinklers and pesticides—but of them plants are perhaps the most important: in Australia, without plants there is no garden. And while they might be placed and tended within a garden by humans, except in the most intensively used gardens they spend most of their time in their own company, growing, communicating,²² responding to changing environmental conditions, reproducing and dying. The way in which they do this will play a role in realising, modifying or betraying the gardener's vision for the garden. If natural processes are inadequate to meet plants' needs, gardeners must be enticed to care for them; otherwise, the plant will die. Sometimes this enticement comes from the plant itself: Hitchings, for example, describes how certain plants are able to draw the gardener 'down into their world, and make for an understanding of their concerns and a commitment to their care'.²³ Robbins proposes that people often plant lawns in response to cultural convention (or even social duress), but the lawns then elicit a sympathetic—if often grudging—commitment to their maintenance.²⁴ Other plants interfere with gardeners' visions and their appearance prompts eradication efforts: the 'duties of stewardship', as Ginn puts it, include killing.²⁵

While gardening's basic principle—selecting and placing plants to achieve a desired outcome—hasn't much changed over time, the plants, invertebrate pests, infrastructure, styles, technologies and human motivations have, allowing the possibility

²² See for example M. Gagliano, M. Renton, N. Duvdevani, M. Timmins and S. Mancuso, 'Out of Sight but Not out of Mind: Alternative Means of Communication in Plants', *PLoS ONE* 7, no.5 (2012) e37382.

doi:10.1371/journal.pone.0037382

²³ Hitchings, 'People, Plants and Performance', p. 106.

²⁴ Robbins, *Lawn People*.

²⁵ Ginn, *Domestic Wild*, p. 127.

of different relationships. For example, changing garden fashions shifted the relative power of different species to entice gardeners to care for them, from palms in the late-Victorian era to gladioli in the interwar years. A seventeenth-century French formalist garden-style demanded different relationships with plants than a twentieth-century Australian bush garden. The introduction of piped water supplies vastly increased the range of plants that could be grown in gardens in places like Perth, Western Australia, where hot and rainless summers otherwise supported only ‘drought-tolerant’ species.²⁶ At the same time, invertebrate and fungal introductions, and destruction of native insect habitats, gave rise to a wider range of garden plant pests, making it more difficult for some plant species to survive, or perhaps find a place in gardens at all, just as new pesticides were developed that appeared to give humans greater control over nature than ever before.

Reading published correspondence in newspapers and gardening magazines and listening to oral history interview enables us to identify how gardeners responded to these and other issues over time. In particular, columns inviting readers to write in and ask for advice on particular gardening problems are revealing of the range of relationships between gardeners and the nonhumans they worked with—or against—in their gardens. Reading closely and interpreting their actions in context, reveals significant continuities as well as some variations over time in these relationships: a keen sense of the contingency of human control over nature is evident throughout, though it is displaced to some extent by the use of potent pesticides. Traditional pest-control approaches that relied on more intimate engagement with non-human garden life were increasingly seen as insufficiently effective at a time of ecological instability, as well as rising standards for gardens, driven by market and social forces. Approaches in which gardeners more

²⁶ Andrea Gaynor, ‘Lawnscape Perth: Water Supply, Gardens, and Scarcity, 1890-1925’, *Journal of Urban History* online first Feb. 16 2017, <https://doi.org/10.1177/0096144217692991>.

deliberately located themselves with(in) nature are evident from the 1930s, when problems with the arsenical pesticides became (more) evident.

Taking an example from 1899, we have one W.H. Spode writing to the *Brisbane Courier* complaining about garden slugs. He had tried several ‘remedies’ for them, including soot, lime, wood ashes, and salt; but none was effective. Spode had contacted the government entomologist for advice, who, only noting that the slugs were introduced from New Caledonia, could not offer any suggestions on their control. So Spode asked if any readers knew whether Paris green would be effective. The slugs, he said ‘are increasing and multiplying to a fearful extent, and if some remedy is not found out we shall have to abandon gardening altogether.’²⁷

On first reading this letter I thought the author must have been using hyperbole for dramatic effect, but on deeper examination there is an ecological story that explains his or her exasperation. The slugs of which Spode complained were a recent introduction to the Brisbane area. Present at the Brisbane Botanical Gardens in 1883, by 1895 they were well established in the suburbs of Brisbane and undergoing a population explosion. By 1899, Government Entomologist Henry Tryon observed that where they occur they are ‘to be met with in immense numbers’, with every square foot of the parks of North Brisbane being occupied by one or more. An acquaintance informed Tryon that in one week he collected more than 6 litres of the slugs, ‘and apparently have made very little progress towards their annihilation’.²⁸ Why they had suddenly spread so rapidly and developed such a voracious appetite for garden plants was unknown. What is certain, however, is that they posed a formidable challenge to gardeners’ ambitions, one that saw gardeners like Spode look beyond traditional remedies to newer, highly toxic pesticides.

²⁷ W.H. Spode, ‘Garden Slugs’ [letter to the editor], *Brisbane Courier*, 15 Apr. 1899, 4.

²⁸ Henry Tryon, ‘Plant Pests: Vaginula Slugs’, *Queensland Agricultural Journal*, 1 July (1899): 64.

While some authors have portrayed the domestic garden as rising fully formed in the post-war era as a technological and chemical landscape,²⁹ there is a significantly longer history of deployment of chemical and other technologies in home gardens. Paris green (copper acetoarsenite) is an arsenical pesticide that first became available in the 1870s. A byproduct of industrialisation, Paris green found use as a paint pigment before its toxicity to insects was discovered and harnessed in the fight against potato beetle. However, not all agricultural scientists supported use of the new pesticide: some advised against it due to its toxicity to plants, instead recommending standard approaches of good crop hygiene and hand-picking. While a human carcinogen and highly toxic to many vertebrates and invertebrates, Paris green was not very effective against slugs. We'll never know whether the slugs, indeed, forced Spode to abandon gardening, but this letter reflects the older view of nature as a force over which humans had limited control, as well as the hope that emerging garden technologies may increase their mastery.

By the 1910s, the attitude that there should be some 'thing' to deal with garden pest problems had become evident. In 1914, for example, a correspondent from North Adelaide was struggling with ants, who were making off with his petunia seeds. Advised that Paris green would 'keep the ants away', he bought some and sprinkled it freely on the plot. To his disappointment 'Not one seed came up, and it seems that the soil and seeds were poisoned by the paris green.'³⁰ He then wrote to *The Mail* to ask how to deal with the ants without killing the seeds. The pragmatic 'Greenleaf' replied that the pesticide had undoubtedly poisoned the seeds, which in future should be planted in boxes out of the reach of ants. Here, the gardener had developed an expectation that chemical remedies would enable gardening-as-usual in the face of an invertebrate challenge. In this case,

²⁹ Wilson, *Culture of Nature*, p. 97.

³⁰ 'Worried', 'Carnations' [letter to the editor], *The Mail* (Adelaide, SA), 7 Feb. 1914, 11.

however, the solution was cultural rather than technical, involving direct engagement with the ants' behaviour, and coexistence rather than attempted annihilation.

Gardeners struggled against certain invertebrates, but also particular plants. In Australia's drier cities like Adelaide and Perth, couch grass (known elsewhere as Bermuda grass, *Cynodon dactylon*), was an important ally in a landscape campaign against the raw heat, sand and dust that perpetually invaded both settlers' homes and their dreams of creating a 'civilised' city.³¹ At the same time, it was seen as a particularly formidable opponent when established in the 'wrong' location. In 1917, the *Home Gardener's* editor advised readers that they needed to fork out and burn every piece of couch grass before beginning a garden, though he observed that

After one or two efforts to check its growth, many people become discouraged.

This does not do, as if allowed a free hand a few clumps of couch grass will quickly claim the whole plot. Persistent hoeing, forking and digging are necessary before complete mastery over this pest is assured.³²

Similar advice was proffered in response to readers' queries through the 1920s about whether there was a weedkiller available that would kill couch in a garden bed.³³ As couch grass usually has runners at least 20 cm under the surface, the non-systemic weedkillers available to pre-war gardeners were ineffective. It is likely that some prospective gardeners resigned themselves instead to a couch lawn, or ongoing manual labour to prevent the plant from taking over their garden beds. Such experiences served to highlight the contingent and limited nature of human control of garden nature.

Onion grass, *Romulea rosea*, elicited similar responses. While its origins in Australia are uncertain, it was an established agricultural weed in Western Australia by

³¹ Gaynor, 'Lawnscapeing Perth'.

³² T. A. Browne, 'Couch Grass in the Garden', *Home Gardener*, 1 Sept. 1917, 1.

³³ Answers to Correspondents, *Sunday Times* (Perth, WA), 8 May 1927, 12; 'Eradicating Couch Grass', *The Mail* (Adelaide, SA), 25 Mar. 1922, 14; 'Killing Couch Grass', *Daily Herald* (Adelaide, SA), 18 Aug. 1923, 6.

the late 1890s, and near Melbourne by 1903.³⁴ By the mid-1910s it was also springing up unbidden in suburban gardens. In Gardenvale, a Melbourne suburb, ‘CRF’ was exercised to write to the *Home Gardener* about the threat:

In this district we find that we are unable to profit by many of the first-rate suggestions contained in the ‘Home Gardener’, as most of our time is absorbed in coping with the growth and spread of onion weed or grass.³⁵

The writer was advised that the only way to deal with the pest was by cutting and pulling out, poisons being ‘useless’. While doubtless containing some exaggeration for the purpose of flattery, this kind of letter acknowledged the agency of the weed in shaping gardening practices, and likely outcomes.

The fate of gardeners’ visions in this period were, therefore, often at least partly determined by the especially active and unruly nature with which they found themselves entangled. The late-19th and early 20th century was a time of considerable socio-ecological instability for gardeners. The popularity of environmental determinist ideas, expressed for example in the early 20th-century garden city movement, would have increased social pressure in some quarters to present a tidy and pleasant garden.³⁶ Local horticultural societies played an important role in the social life of many an inter-war suburbanite, while the emerging domestic horticultural industry was endeavouring to expand its market.³⁷ Concurrently, garden pests increased. New invertebrates and pathogens arrived and native invertebrates began to seek out exotic plants, just as

³⁴ ‘Supposed Poisoning Of Cattle’, *West Australian* (Perth, WA), 13 Oct. 1897, 7; ‘Agricultural News’, *Leader* (Melbourne, Vic), 20 June 1903, 5.

³⁵ ‘CRF’, ‘Answers to Correspondents’, *Home Gardener*, 2 July 1917, 155.

³⁶ Robert Freestone, ‘Planning, Housing, Gardening: Home as a Garden Suburb’, in P. Troy (ed.) *A History of European Housing in Australia* (Cambridge: Cambridge University Press, 2000), pp.125-141.

³⁷ see for example Richard Aitken, ‘Horticultural Societies’, in Richard Aitken and Michael Looker (eds.), *The Oxford Companion to Australian Gardens*, pp.312-3 (Oxford: Oxford University Press, 2002); Richard Aitken, ‘Bunning, George’, in Aitken and Looker (eds.), *The Oxford Companion to Australian Gardens*, pp.111-2; and Richard Aitken, ‘Yates, Arthur’, in Aitken and Looker (eds.), *The Oxford Companion to Australian Gardens*, pp.656-7.

developments like the advent and extension of piped water schemes and improvements in lawnmowing technology were setting the bar for garden maintenance ever higher. In this context, it is unsurprising that many gardeners found themselves increasingly attracted to new and potent pesticides, such as lead arsenate, a successor to Paris green, which became widely available in the first decades of the 20th century.³⁸ Amidst increasing aspirations, gardeners' embodied experiences in the garden demonstrated their marginal personal control over the non-human.

Interwar letters to the *Home Gardener* reflect gardeners' failure to control garden non-humans. A typical 'Queries and answers' column of 1935 is suggestive, with correspondents asking: what's eating the carnations? Why are the onions running to seed? Why aren't the nasturtiums flowering? Why are the lilliums growing so slowly?³⁹ Such evidence suggests the importance of considering failure and disappointment, struggle and compromise, alongside the more usual focus on visions and their realisation, in garden histories. They point to the embodied reality of gardening as an intimate and often reciprocal engagement of human and non-human, in which humans were entangled with, and certainly not above, nature.

To some extent, and in some gardeners' practices, arsenical pesticide use for a time enabled a higher level of control. However, by the 1930s the problems of invertebrate resistance to lead arsenate, as well as recurrent scares over lead arsenate residues on commercial fruit and vegetables likely dampened enthusiasm for this 'remedy'.⁴⁰ While pesticide-use continued, a revival in ideas for simpler, manual strategies for dealing with pests became evident. For example, a correspondent to Perth's *Daily News* in 1933 observed rain washing aphids off garden plants and concluded that

³⁸ Andrea Gaynor, *Harvest of the Suburbs: An Environmental History of Growing Food in Australian Cities* (Crawley: University of Western Australia Press, 2006), pp. 32-3.

³⁹ 'Queries and answers', *Home Gardener*, 2 Dec. 1935, 29.

⁴⁰ Gaynor, *Harvest of the Suburbs*, pp. 91-2.

the hose was the best tool for dealing with aphids, in addition to natural controls such as lacewing larvae: 'If among the bloated suckers clustered on your rose stem you observe a somewhat larger insect of peculiar appearance, with a number of aphid skins sticking to it, just call it friend'.⁴¹ This desire to work with, even befriend, some garden non-humans is indicative of a more adaptive, less separationist approach. This resonated with the kind of romantic attachment to nature found in the tradition of popular Australian nature writing exemplified by Donald Macdonald, James Barrett, Alec Chisholm and James Pollard.⁴² It would be further developed by the organic gardening and farming movement that emerged in the 1940s and was quickly taken up in Australia.⁴³

One of the fathers of the organic gardening movement, Sir Albert Howard, proclaimed that 'The first duty of the agriculturalist must always be to understand that he is a part of Nature and cannot escape from his environment. He must therefore obey Nature's rules'.⁴⁴ Organic proponents explicitly rejected 'the flattering belief that Man is now Master of his universe, holding the keys to its management and exploitation'.⁴⁵ While still seeking to manipulate nature to their advantage using their own set of discourses and practices, their approaches did not seek to shore up the boundaries between human and non-human, but to situate the human within nature.

Central to organic gardening practice was the production of compost. While the published literature includes numerous articles on how to make compost, there are few

⁴¹ 'J.P.', 'My Nature Diary', *Daily News* (Perth, WA), 8 Sept. 1933, 6.

⁴² Tom Griffiths, *Hunters and Collectors: The Antiquarian Imagination in Australia* (Cambridge: Cambridge University Press, 1996), 122-149; Tom Griffiths, 'The Natural History of Melbourne': The Culture of Nature Writing in Victoria, 1880- 1945' *Australian Historical Studies*, 23, no. 93, (1989): 339-65.

⁴³ For more on the history of organic gardening and farming in Australia see Gaynor, *Harvest of the Suburbs*, pp.121-123; Rebecca Jones, *Green Harvest: A History of Organic Farming and Gardening in Australia* (Collingwood, CSIRO Publishing: 2010). For an extended discussion of the politics of organic gardening in Australia see Andrea Gaynor, 'Antipodean Eco-nazis? The Organic Gardening and Farming Movement and Far-right Ecology in Postwar Australia', *Australian Historical Studies* 43, no.2 (2012): 253-269.

⁴⁴ Albert Howard, *The Soil and Health: A Study of Organic Agriculture* (1947; repr., Lexington: University Press of Kentucky, 2011), p. 194.

⁴⁵ E. Jeremy, 'New Aspects of Gardening', *Beverly Times* (Beverly, WA) 15 Dec. 1944, 3.

first-hand accounts of its practice or meaning. Here, second-hand observations must suffice. The Bradley sisters, who gardened in the Sydney suburb of Mosman, had been conventional gardeners until the early 1950s, when Eleanor Bradley developed a badly swollen lip after spraying azaleas with DDT. Having found and read the work of Sir Albert Howard and Lady Balfour, they experimented with compost and soon became passionate about it. Their niece remembers that the compost pile, named 'Sir Albert', received almost all garden waste, 'chopped up with a cleaver' then placed on the heap; friends said the process of making a compost heap was 'like watching someone make a layer cake'.⁴⁶ Here was an active, creative human connection to the cycling of material by microbiological agents that drew parallels with the creativity of cooking. Like other elements of gardening, compost-making, to be successful, required due attention to materials, monitoring, and manipulating, in which human intervention was as much about response as control.

In addition to their enthusiasm for composting as a way of 'working with nature, organic gardeners rejected synthetic pesticides as unnatural. Conventional agricultural scientists, too, expressed caution in relation to pesticide use. This concern would increase in the 1950s, by which time new organochlorine and organophosphate pesticides had become widely available. While taken up with enthusiasm in some quarters their use, at least in the garden setting, was not without controversy.

In 1951, Percy Hurley, who wrote as 'Waratah' for the *Sydney Morning Herald*, was 'taken to task by a correspondent for recommending the use of that new, lethal spray, E605.' This is Parathion, an organophosphate extremely toxic to birds, bees and fish, as well as humans. The correspondent preferred 'natural methods', and spoke of 'upsetting nature's balance'. Hurley acknowledged the usefulness of natural enemies of plant pests,

⁴⁶ Margaret Simons, *Resurrection in a Bucket* (Crows Nest: Allen & Unwin, 2004), p. 77.

but argued that due to the ‘enemy hordes that increase year by year’ it was necessary to ‘spray and cleanse’ your plants ‘if you value them’; this was best done preventively, and with the most modern insecticides.⁴⁷ In 1954, he complained similarly about ‘gardeners who shudder at the thought of a spray-pump’.⁴⁸ At one level, this was about the maintenance of garden hygiene and appearance; part of maintaining neighbourhood ‘standards’ and an appropriate display of suburban respectability. But it was also in part a response to ongoing experiences of invertebrate proliferation due to the sweeping ecological changes wrought by colonisation, suburbanisation and ecological modernity more generally. In a world where ‘nature’s balance’ was already well and truly upset, the scale of the natural forces assailing domestic gardens made these technologies highly attractive. As another garden columnist put it: ‘The week-end enthusiast extracts greatest physical satisfaction from the mechanical destruction of weeds, but mass destruction demands chemical control’.⁴⁹ The attraction was enlarged by changing trends in leisure, driven by increasing car ownership and use, that saw many gardeners spending less time engaging with garden nature, and more time travelling to and observing more remote and exotic natures and other attractions. As Melbourne resident Tot White put it:

when you got a car you didn’t stay home and do your gardening, you went to the beach or the country, or somewhere...that was your recreation—instead of pottering around doing the garden, you went for a drive.⁵⁰

Although some home gardeners—including Hurley—were happy to deploy scientific knowledge in the form of horticultural technology to control an unruly nature, many scientists were more circumspect. In 1951, Western Australian Government

⁴⁷ ‘Waratah’, ‘Pests Must Be Kept Under’, *Sydney Morning Herald*, 8 Dec. 1951, 2.

⁴⁸ ‘Waratah’, ‘Be Selective In Your Spraying’, *Sun-Herald* (Sydney, NSW), 7 Feb. 1954, 62.

⁴⁹ ‘The Flower Garden’, *North-Eastern Advertiser* (Scottsdale, Tas.), 2 July 1948, 4.

⁵⁰ Tot White, interviewed by the author, 20 July 1999.

Entomologist CFH Jenkins broadcast on ABC radio a talk, later published in full in the *Western Mail*, pointing out the various dangers involved with the use of the new generation of pesticides. Although he believed that ‘a constant battle must be waged’ against insect pests, and acknowledged the advantages of the new pesticides, Jenkins saw them as problematic due to their destruction of predator species; acute and residual toxicity to humans and animals; and accumulation in human tissues and breast milk.⁵¹ His solution was technocratic: proceed with caution and gather further scientific information on the human, ecological and economic risks. While acknowledging the permeability of human bodies and their interconnectedness with surroundings, this approach remained quite firmly grounded in a humanist ontology.

Rather than enthusiastically embracing potent but dangerous new technologies, or engaging in the often-intensive labour required for organic methods, some of my oral history informants, generally suburban gardeners from lower middle-class households, simply gave up on growing anything that was too susceptible to pests. This was one response to the Cabbage White Butterfly, first found in Melbourne in 1939, quickly spreading along the east coast thereafter. Four years later, someone caught the first specimen in Perth in a backyard vegetable garden.⁵² The damage wrought by the butterfly (in its caterpillar phase) was devastating. Ben Cook recalled in 1998:

I always used to like growing cabbages until in the last 50 years of course this white cabbage moth has invaded the gardens and you couldn't stop the cabbage moth getting into the cabbages and cauliflowers so I haven't grown them for years.⁵³

⁵¹ C.F.H. Jenkins, ‘Insecticides – New and Old’, *Western Mail* (Perth, WA), 6 Sept. 1951, 63, 69.

⁵² C.F.H. Jenkins, *Some West Australian Insect Pests* (n.p., c.1943) p. 22.

⁵³ Ben Cook, interviewed by the author, 7 Oct. 1998. Although Ben refers to the ‘cabbage moth’, it is clear from his use of the description ‘white’ that he is referring to the cabbage white butterfly, rather than the diamondback moth, which is usually referred to as the cabbage moth.

Similarly, while gardening in a Melbourne suburb in the 1940s Tim and Tot White didn't grow a lot of cabbage—'you couldn't. The moth'd get to that in no time'.⁵⁴ These approaches reflect older, fatalistic approaches to nature, and a disinclination to engage in the modernist practices of control and domination.

The late-nineteenth and early 20th-century sources show home gardeners seeing and negotiating an active and often formidable nature, though holding out the hope of control in a time of ecological instability. In attempting to protect favoured plants from weeds and garden invertebrates, their control efforts sometimes failed; some would then write asking for advice on what 'remedy' could assist them. Here, control of 'nature' is a promise held out by poisons such as lead arsenate and Paris green, but not yet fully delivered. This must have been a humbling experience, leading to ongoing recognition of the autonomy of non-humans in the face of modernisation.

From WWII, greater power to change the non-human world was realised through the development of new technologies, their promotion in gardening literature and distribution to gardeners through flourishing retail outlets. At this time, knowledge and practices around modes of interaction with non-humans diverged more sharply. Some celebrated the power apparently conferred on humans by the new substances and viewed the influx of pests as a war that had to be fought – and won – using the most modern, powerful means. On the other hand, voices of caution were raised. Agricultural scientists pointed to the pesticide risks identified by science in relation to human and ecological health. Organic gardeners were wary of meddling with 'nature' and deliberately endeavoured to situate themselves within it, by following 'natural laws' and avoiding practices deemed 'unnatural'. Other gardeners' actions reflected a pragmatic acceptance that domination of nature was unattainable: pursuit of their garden visions involved

⁵⁴ Tim and Tot White, interviewed by the author, 20 July 1999.

considerable effort, modification and ultimately compromise. The persistence of this unspectacular but perhaps widespread subjectivity begs for further investigation.

In the context of modernity, we would expect to see an increasing desire to demonstrate mastery over nature; and indeed this is partly borne out by the evidence. However, this desire was not omnipresent, and the evidence also points to an increasing polarisation among gardeners between those seeking to control nature and those seeking to work with (or within) ‘nature’ or at least acknowledge, through their actions, that they declined to pursue greater control. This diversity is somewhat at odds with Nimmo’s portrayal of a pervasive humanist ontological architecture concerned with maintaining the separation and purity of the ‘cultural’. Looking beyond technocratic and commercial interventions, gardens reveal a range of practices, understandings and relationships, suggesting considerable ontological diversity and subtle but significant change over time.

Gardens have never been simply ‘a cultural product’.⁵⁵ Rather, they have always been co-productions of human and non-human. In Australian domestic gardens ‘nature’ to a considerable extent shaped which plants flourished, which failed to meet expectations, and ultimately whether a gardener’s vision could be realised. In this tentative exploration of the embodied experience of gardening in the lead-up to high modernity, several aspects of these relationships have stood out. Firstly, while it is easy to interpret an enthusiasm for chemical pesticides as concomitant to the rise of modernity and predicated on an increasing desire for separation from and control over nature, to some extent it represents the opposite: a response to intimate engagement with unstable and often bewildering ecologies. Social and cultural factors also played a role in increasing expectations of garden appearance. The initial romance with the toxic and persistent arsenical insecticides faded in the 1930s, encouraging some gardeners to

⁵⁵ Macdonald, ‘Gardens, Landscapes, Wilderness’, p.15

deliberately pursue a less interventionist approach. Attending to the struggles and compromise that marked most people's garden-making, what we find common to many approaches is an intimacy and reciprocity with quotidian nature. As such, it is unsurprising that authors from Hugh Stretton to Christopher Sellers have placed suburbanites, many of whom are domestic gardeners, at the heart of environmental movements.⁵⁶

Acknowledgement: I would like to acknowledge James Beattie for his helpful comments on an earlier version of this paper. Any errors or omissions remain my own.

⁵⁶ Hugh Stretton, *Capitalism, Socialism and the Environment*, (Cambridge: Cambridge University Press, 1976), p. 202; Christopher C. Sellers, *Crabgrass Crucible: Suburban Nature and the Rise of Environmentalism in Twentieth-Century America*, (Chapel Hill: University of North Carolina Press, 2012).