Environmental weeds beyond control within a drinking-water catchment (image by author, 2025).

LANDSCAPE REVIEW

Weeds, war and reconceptualising nature in Aotearoa New Zealand: a provocation to theorists from a practitioner at the coalface

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Warning: This essay contains disturbing ecological forecasts and challenges to mainstream cultural attitudes towards weeds, our idea of nature, and the future management of native forests in Aotearoa New Zealand. It argues for dismantling popular but inadequate environmental dogmas, which will be galling to many. However – *spoiler alert* – it concludes, optimistically, that environmental weeds will ultimately force us to create more robust conceptions of nature, and pragmatic management approaches. In short, it will be good for us, even if we hate this prospect at present. And no, the word *hate* is not too strong. (I predict the strongest reactions will come from those who love native forests the most. And I sympathise completely.) Let's cut straight to the nub. An insurmountable environmental weed problem is coming to rural Aotearoa New Zealand. It won't be beaten by chemical or biological warfare, updating noxious pest-plant lists, mobilising the unemployed, volunteers and high-tech drones, or planting native trees. This apprehension is based on observations and decades of professional experience and has led to my premise that it's a battle that can be won only with a change of mindset. Environmental weeds will eventually force us to reconceptualise 'nature' in Aotearoa New Zealand.

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Introduction

It is well substantiated that some weeds can threaten the native ecosystems providing important biodiversity that ultimately underpins life on Earth as we know it (and that we want to continue). In dry, sciency terms, displacement of indigenous flora and fauna by exotic species can have significant adverse effects on local ecologies – possibly triggering a cascade to collapse. Weeds and pests can also have significant economic impacts and affect cultural landscape values, including perceptions of natural character. Colloquially though, the weed threats to native forests are described calamitously, and responses adopt the language of war. And it's these popular attitudes that are my target. For as much as it terrifies me, I consider the war on weeds is unwinnable and, therefore, the war-like attitude is simply inadequate. It's a shonky dogma that needs reforming.

Another forewarning: Part of the rationale used in this essay unconventionally links prevailing contemporary conservation attitudes towards weeds with negative impacts on our mental health and ability to enjoy our landscape.

KEY WORDS
weeds; native; exotic; invasion; war; novel ecosystems

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Figure 1. Weed upon weed (image by author, 2025).

The present situation

Some facts

- Aotearoa New Zealand now has more exotic plant species naturalised (that is, reproducing in the wild) than indigenous plant species – 2,390 exotic versus 2,158 native, as at 2008 (Howell, 2008).
- In 2008, the Department of Conservation published a consolidated list of 328 exotic vascular plant species considered to be environmental weeds (Howell, 2008). Given the rate of new naturalisations and latent offenders, the list was expected to grow annually.
- Up until 2021, just 11 exotic plant species introduced since the start of European settlement are believed to have been eradicated from the whole of Aotearoa New Zealand (Parliamentary Commissioner for the Environment, 2021, p 115).
- Old man's beard (*Clematis vitalba*) can produce over 35,000 seeds per square metre (ibid, p 50).
- Each fluffy tuft of pampas (*Cortaderia jubata*) averages one million seeds in its first year (New Zealand Plant Conservation Network, nd). Some seeds travel up to 50 kilometres on the wind.

Some experiences

Pampas grass is a cutty-grass sometimes erroneously mistaken for toetoe. It trucked its way into our neighbourhood within the roading metal. Twenty years later, it now forms impenetrable verges, swishing literally billions of seeds to the breeze. It has invaded every fringe of bush, as well as every roadside cutting, slip, firebreak and pine cutover, in the area. I pull young sprouts out on my tracks and note where to come back with a knapsack sprayer.

Two years ago, I discovered the first sneaking pup of the dreaded weed, Kahili ginger (*Hedychium garderianum*), within my beloved forest. It was an emotional body blow. I felt sick with shock and heavily defeated. Yet, hadn't I always known this day would come? Birds were always going to trickle the seed in from the unconquerable local infestations beyond my boundaries. Last week I found four more ginger pups. It is simply a numbers game and a function of time. Words like 'innocuous' slip sideways into 'insidious', 'incremental' bends into 'exponential', 'shade-tolerance' adjusts its grip to become 'smothering', and 'manageable' gradually morphs into 'the impossible'.

We are surrounded by thousands of hectares of steep, scrub-covered farms, lifestyle blocks and reverting bush. None of our neighbours has the time and resources, nor the physical ability to be crawling through their thick gorse and pampas infested patches, searching for the first incursions of new local weeds like ginger, moth plant, brush wattle, privet and Taiwanese cherry. And even if they did, what about all the other existing weeds? Waves will follow waves – 'and still they come'.

A musically talented ecologist might rap out the contemporary hit list in song:

> Bind weed, devil weed, tobacco weed, giant reeds, bat-wing, banana passionfruit, bamboo and tree privet too. Chinese privet, African club moss, jasmine, Japanese honey suckle, English ivy and morning glory …

Or maybe the botanicals like *Selaginella* sound more sinister, and *Azolla* for a more monstrous fear*?* '*Aristea, Cotoneaster, Elaeagnus*, *Agapanthus* and …' The hits go on.

The flurry of new dwellings on our road has unleashed more invaders. When first visiting one of our new neighbours, I pointed out a furtively fruiting moth plant vine (*Araujia hortorum*) amongst the gorse on the side of a neighbour's driveway. Presumably it hitched in with the earthwork machines. This is a devastating weed around anyone's neck of the woods – and it is terrifying to find it around mine. Moth plant, or kapok vine, is tolerant of sun, shade, dry, wet, wind and salt, and is resistant to grazing. It rampantly clambers over the canopy producing numerous choko-like pods, each releasing 250 to 1,000 wind-dispersed seeds (Weedbusters, nd). Its sap is poisonous and it's very hard to kill. Roots break off when pulled. Fortunately, our new neighbours are very nice people and were genuinely concerned to learn of it. However, they have an aversion to the use of herbicides, and with a building project demanding most of their focus and energy I worry that this one will get away from them.

Drive around the old settlements of Hokianga with an ecologist's eye and you will see the result of past ignorance of the propensity for exotic species to naturalise and become pest weed infestations. These days, enthusiasm rather than ignorance is probably more common. People tend to overestimate their ability to keep control of their garden menageries and underestimate the likelihood that their changing and unpredictable health, finances or life circumstances will curtail their capacity to successfully do so. Such optimism is a remarkable and loveable human trait, but nevertheless delusional, and in the context of the unfolding weeds crisis, it should be called out as such. However, not everyone shares my values, preferences and fears for native forest – even those living out in the bush.

'Food-forest' has become a term that strikes panic in me. This year was the first time I noticed loquats invading my forest. Kererū keep planting them beneath the pūriri trees. I've pulled out hundreds of them, but I can't get around all the trees of my forest. This will become yet another unsustainable effort. When I told the food-forester who I suspect to be the source of this new weed invasion, he said, 'It's good. It's food.' His response was similar when I found a banana passionfruit vine. I worry now about his guavas too. Pandora's box is busted wide open. Clearly, there are many more fugitives to come.

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Of course, I'm seeing this all too dark. Just like the needless self-doubts the early climate-change scientists had. Whistleblower, crackpot, down a rabbit hole, or just stuck down paranoia street?

Some people point to successful pest-plant control efforts. But generally killing off one weed species just provides opportunity for another or restarts the process. Where natives do displace the weeds, the question remains: how will they fare in the face of incessant future invasions – how sustainable or enduring was the control effort? Funding must be ongoing to keep our feet on the throats of these dogs when they're down. One battle won't win the war.

For many of our messed-over, modified landscapes, weed species dominate, co-dominate, or are at least an inextricable fibre of the vegetation matrix. The popular

dichotomy of native forest as something pure and distinct from a mix of native and exotic vegetation doesn't really exist any more in many landscapes, and it certainly won't in the future. Eventually, not even the giant Puketī, the largest block of pure bush in Northland, will be immune. Ginger, *Tradescantia*, *Aristea* and other shade-tolerant weeds are all around the edges and already infiltrating its veins. Given the leverage of numbers, time and scale, overlain on steep terrain with few roads or tracks, and hopelessly thin budgets, the weeds will wriggle in. Just like ginger is already doing around the forests of Warawara and Waipoua. Don't worry; be happy.

Under the long white cloud – the temperate blanket and vapours of Aotearoa – Northland provides a particularly fecund climate and incubatory cover for these ecological counter-cultures. In many places, the scale of the existing weed problem is already unmanageable and any expectation to achieve landscape-scale eradication is delusional. However, it is the inevitable and exponential future trajectory that is my key point. In this respect, I believe Northland is the canary in the coalmine, and the losing battlefield that foreshadows the future for the whole country. Someone please tell the generals and work out what this means.

Figure 2. Tree privet, Taiwanese cherry and wild ginger already infest local pine forests at an unmanageable scale. Drones won't help with this (image by author, 2025).

The language of war

I'm not the first to notice the hallmarks of hate speech when New Zealanders get going on weeds, pests and predators. Nor am I the first to sense that this fervour has some connection to contemporary social ideas about the value of indigeneity and a cultural sense of belonging (Steer, 2015). To this end, planting native trees and fighting exotic weeds has become an ideological cause. A post-colonial guilt salve perhaps? And, in this cultural construction, there are clear goodies and baddies. Natives good, exotics bad. We all want a simple world. Gimme a target!

In 2015, Maggie Barry, the then Minister of Conservation, announced a 'war on weeds' and encouraged New Zealanders to roll up their sleeves and join in (Department of Conservation, 2015). In 2016, she identified the 'Dirty Dozen' – weed species to receive targeted extra funding. The campaigns against weeds were complemented by government policies for a predator-free Aotearoa New Zealand and to plant a billion trees – two-thirds of them native. Indeed, the initiatives are intertwined. Under the heading 'A billion trees

and a trillion weeds', Farah Hancock of *Newsroom* pointed out, 'Planting trees is only part of the battle to scale up native tree regeneration efforts. In order for the trees to thrive, a war must be waged on weeds and wildings' (Hancock, 2018).

Killing for conservation has been described as a 'national pastime' in Aotearoa New Zealand (Linklater, 2017). Running over possums is practically part of our national identity (White, 2016). War-talk rolls easily off New Zealanders' tongues, and we are encouraged to be weekend warriors. Despite the atrocious connotations, the language of war seems to be totally acceptable for use in these environmental circles and for these environmental purposes. But what are the ramifications of living in such a war-torn country?

Oversimplifications, half-truths, omissions and demonisation are common features of war propaganda. Should we be concerned when these same strategies are used in our environmental campaigns? In 2017, Dr Wayne Linklater, Associate Professor of Ecology at Victoria University, wrote about his discomfort with a Brownie's guidebook recommending his eight-year-old daughter make a poster to advocate the killing of exotic species (Linklater, 2017). This highlights how prejudiced language and attitudes against weeds and pests can creep in to our thinking and pervade it more widely. I have often heard incredulous reactions to others' complaints about cutting down trees: 'Why [are they complaining]? It wasn't a native', as if exotic species somehow cannot also be magnificent living beings. Who refuses to marvel at the buttressed roots of a 147-year-old Moreton Bay fig in Kororareka, Russell? Do we really want the redwoods in Rotorua to be killed by zealous Brownies?

Dr Linklater wrote, 'I don't like them [children] being taught to demonise an entire species of animal, … I'd like my daughter to have empathy much more than I want her to have a reason and willingness to kill.' I can relate to this too. Once, as I was about to put down a wild tomcat in a cage trap, my own five-year-old daughter came lashing out at me in distress and desperation. 'It's not his fault! He can't help being born a cat. He wants to live too! How would you like being shot?' Of course, I countered with a cold ecological rationale. Yet all her points were valid and true, and I told her so. Then, not wanting my hard-nosed dogma to crush something so young, so beautiful and so precious, I let the cat go. The inability to reconcile our popular environmentalist attitudes with some other important value-sets still troubles me.

A paper titled 'Native vs exotic: cultural discourses about flora, fauna and belonging in Australia' (Trigger and Mulcock, 2005) sets out:

> Isis Brook, an environmental philosopher, cautions that 'debate around invasive species needs careful handling for both ecological and social reasons'. Like other writers, she notes that 'the rhetoric of invasion and degradation [can] apply both ecologically and culturally', and that 'nativism in ecology' can be uncomfortably linked to racism.

What exactly are we teaching our Brownies and budding Girl Guides in Aotearoa New Zealand?

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In social spheres, we've been progressively trying to expunge language, labels and attitudes that foster and support such things as wars, slavery, cruelty, cultural imperialism, racism and sexism. Yet in our environmental war campaigns we still use language and attitudes that, if applied to social or cultural matters, would be criticised, and condemned as being discriminatory, divisive, dangerous, toxic and totally unacceptable. Surely some sort of a double-think is occurring here. On one hand, in the wake of the abhorrent Christchurch mass-murder, slogans reassured us that 'we are not like that', but, on the other hand, when it comes to some things, like certain plants and certain animals – oh, in fact, we are.

Aren't we humans amazing harbours of brilliance and blindness? At one level, our top scientists try to reconcile the least accessible and most intricate discrepancies of the universe. Yet, nearer the surface and much closer to shore, the discord between our

environmental and social attitudes goes unchallenged. Who is calling for this conversation apart from a few concerned ecologists such as Dr Linklater? I guess it requires an avant-garde in the first instance or, in the absence of that, this role often falls by default to artists and outsiders. In respect to our societal attitudes towards exotic plants and our war on weeds, famous artist and Austrian-born New Zealander Friedensreich Hundertwasser definitely had something challenging to say.

Hundertwasser

Friedrich Stowasser, the name he was born to, experienced the true horrors of war and discrimination as an adolescent half-Jew in Austria under Nazi rule. He joined the Hitler-youth as a cover, while his Jewish mother, auntie and grandmother hid in the basement. At not quite 10 years old, it fell on him to deflect the SS-youth commanders at the house door (Harry, 2005). Unfortunately, not always successfully. His auntie and grandmother were taken and never seen again. He and his mother survived, but in constant fear of denouncement. Later, as an artist, he changed his name to Friedensreich Hundertwasser and eventually the internationally renowned architect-artist very proudly became a citizen of Aotearoa New Zealand. He gifted a koru-inspired flag design to the nation, proposing it as a second flag – not a replacement (Hundertwasser, 1983). An accompanying design manifesto explained, amongst other things, that the flag represents peace with nature. Yet, when I had the privilege of visiting Hundertwasser's property, Kaurinui, near Opua, I found his frame on 'nature' confronting.

What I saw was a hodgepodge pizza of unrelated plants, including many weeds, all incoherently poked around the bush and let free. I couldn't enjoy it. And I've worried about that response ever since. What threatened me most was his obvious indiscriminate appreciation of plants irrespective of their whakapapa, weeds and all. He didn't divide nature by human classifications or prejudices. This comes out in his writings on ecology: 'It is your duty to use all means to help spontaneous vegetation be instated in its rights' (Hundertwasser, nd).

The third tenet of his 1983 Peace Treaty with Nature is 'Tolerance of spontaneous vegetation'. He refined this theme over the decades. 'There are no evils in nature …' and 'When man thinks he has to correct nature, it is an irreparable mistake every time. A community should not consider it an honour how much spontaneous vegetation it destroys …' (Hundertwasser, 1990).

It seems, from people who knew him well (Noma Shepard, pers comm, nd), that he took great delight in weeds as 'spontaneous vegetation' and a pure expression of nature.

Unfortunately, there is plenty of history to support Hundertwasser's conviction that our meddling with nature usually is an ignorant mistake. For example, I recall a story in the *New Zealand Herald* (2023), titled '"Drastic" rat tactic to fight messy birds in wetland', about Rotopiko, a small lake in Waikato, with a predator-proof fence. Rats had been eradicated within the area and, consequently, local bird populations greatly enjoyed roosting in the safe zone created. As a result, the estimated population of starlings grew to over 500,000 and their defecation began eutrophying the lake, ruining the freshwater habitat. The managers reintroduced 30 rats to deter the birds! Reality close to satire. Reintroducing browsers in *some* places to help control weeds is no longer inconceivable to me.

Hundertwasser's hands-off approach is presumably based on the belief that nature will find a dynamic equilibrium. Other artists and authors (for example, Thomas, 2014) also argue that, in time, we will reach that elusive state where we can all comfortably call ourselves 'native' in a newly balanced ecosystem that includes us all – Māori, subsequent settlers and immigrants, and all the plants and animals we have on board. However, I understand most ecologists have abandoned outdated notions of equilibrium and now talk more about non-equilibrium, unpredictable fluxes, and open-ended systems. Hundertwasser was an artist first and foremost, as well as a thinker and an activist, but not a trained ecologist. Nevertheless, I am deeply envious of how he could see sublime beauty where I winced my eyes at an incoherent environmental mess.

The ideological congruency of his ecological activism with immigrant-friendly and anti-discrimination social policies still somehow feels important. Given Hundertwasser's traumatic formative years, this not only makes sense, but makes it much harder to dismiss. Dare we suggest he lacked prejudices against exotic weeds only because he wasn't a *true* New Zealander? His Peace Treaty with Nature has no prejudices, no hate and no futile war. It is a gospel offering alleviation to depressed environmentalists and perhaps a salving absolution for the descendants of immigrant settlers too. Of course, I had to try it out.

The small town of Kawakawa was already adorned with a public loo designed by the famous artist and, years after his death, a community trust had an expansion project under way – Te Hononga, Kawakawa Hundertwasser Memorial Park. Inevitably, this became a multifunctional thing; a Hundertwasser tribute with a community cultural service centre, plus visitor facilities, all conflated to 'embody the joining of cultures'. I was invited to offer my services for its landscape design. Spontaneous vegetation, here I come!

The landscape concept I presented to the trustees was radical but, I believe, robustly based on Hundertwasser's writings. I related what I understood from his various manifestos, his delight in weeds as an expression of nature 'uncorrected by man', and his lack of species-based discrimination. Alarm rose noticeably amongst the sideways glances of the trustees. Ploughing on, I described a wild, unkempt aesthetic and the handing over of total freedom to nature. The feature piece should be a raised area of fresh, raw earth, laid open and bare. It would be receptive to the vagaries of contemporary nature, chance and time, creating a living sculpture, a real-time real-life nature show, from the earliest germinations through to scrummaging battles between weeds, trees and vines. It would be the celebration of spontaneous vegetation that he wrote so fervently about.

One panel member, who had known the artist well, seemed to nod in support, but the others appeared to be embarrassed by this preposterousness. Later, I heard it had polarised the panel and they chose a safer option. I wasn't disappointed or surprised. Maybe I was even relieved. It probably saved me from infamy and hatred. While intrigued by this ideology, I was never a true convert. There are issues with the doctrine. It is hard to reconcile it with any responsibility to protect indigenous biodiversity. Furthermore, in Aotearoa New Zealand, Hundertwasser's Peace Treaty with Nature must be subjugate to a much better-known treaty.

Te Tiriti o Waitangi

It has often struck me as odd that many Māori, even those with hard anti-colonialism sentiments, frequently still have exotic garden plants around their houses and farms. But then when I think about it, Māori were always keen adopters of introduced things, from pigs and potatoes to the latest technologies and media. On Matariki weekend in 2024, Kai Tahu artists used computer-controlled drones for a lightshow spectacle in Logan Park, Dunedin. Māori tend to accommodate things and make them their own.

The same inclination is echoed at a landscape scale. For example, when the government proposed removing exotic forest species, such as pines, from the 'permanent forest' category of the Emissions Trading Scheme, Ngā Pou a Tāne – the National Māori Forestry Association vociferously protested. What a remarkable situation. Here we had environmental non-governmental organisations fighting for native forests only, while some Māori were proclaiming their exotic forests as taonga and evoking rights under Te Tiriti o Waitangi – the Treaty of Waitangi to protect them. Presumably achieving social agendas was the main reason behind that. However, this focus also reflects the priorities set out in one of the best-known Māori proverbs:

> He aha te mea nui o te ao?
> He tangata, he tangata, he tangata.
>
> What is the most important thing in the world?
> It is people, it is people, it is people.

It's not the first time I have noticed tensions between Māori and western-influenced conservation ideals. Counterintuitively, it is Māori who are often the more willing accommodators of introduced species and of their consequences. I assume this reflects cultural differences in construing and valuing nature in our landscapes; Māori thinking of themselves and their actions as part of it – and not necessarily a desecration. Kaitiakitanga (guardianship) isn't angling at some unattainable pre-human state of purity.

Rob McGowan, a trustee of Tāne's Tree Trust, interprets the Māori word 'mauri' as the web of life-sustaining relationships and connections between all things and that allow us, both humans and Papatūānuku (Earth mother), to thrive. He is more concerned about healing the land by restoring a functional ecology than about whether all the plants serving that purpose are purely native. It's the relationships that are important. Similarly ethnobiologist Dr Priscilla Wehi seems to suggest that, when dealing with invasive alien species, and when eradication is impractical, indigenous philosophies could 'create new, shared space by centring relationships, fulfilling responsibilities and realising justice' (Wehi et al, 2023).

There is an honesty associated with this approach and a useful pragmatism too. Moreover, it seems that Te Tiriti doesn't preclude accepting introduced species and hybrid landscapes. Indeed, it may even be the conceptual basis to legitimising them.

I'm not going to take this idea any further. It is a matter for experts and much wider debate. The key question posed here is simply whether reforming delusional/popular environmental ideals and adopting an alternative concept of nature, perhaps more like the Māori one, could help us come to terms with our bogeymen – the weeds? Because come to terms with them we must – somehow. It's a matter of mental health. Mine at least!

Mental health

The main idea of this section follows a fine vine of suspicion down into the understory. Like a fishing line tangled in kelp, it might be unsound and break. But I'm not claiming it to be science or anything more than relating my own troubled thoughts and experience. It tugs in this direction; that priming an eco-warrior with fears and for warfare is bad for his brain. His sniper's eye will reinforce neural pathways that do see, in fact, the enemies are everywhere and even more than before. And his creaking knees know there will be no end to this war on weeds. Repetitive exposure to such negativity is adversely affecting his happiness, while others blissfully enjoy the very same landscape.

Symptoms of his affliction commonly include an up-then-down, joy-then-frown emotional pattern. For example, when driving around the countryside, it frequently goes like this:

> 'Wow, that's quite nice [Romantic bucolic scene].' – Oh-oh,
> Yo-yo, 'Shit! Look at all the bloody ginger there!'

Other situations involve more prolonged stress. For example, when he is visiting new friends for the first time, they proudly show off their extensive gardening activities. His face sets a mild smile and a compartment of brain somehow keeps conversation going, masking his quiet despair at what he sees – another malignant cell in his beloved country. He feels bad about being such a serious killjoy. His soldier's eye keeps spotting the enemy, and wishes he could instead be that happy and fun person. Pour the wine please.

While this is a personal malaise, shouldn't we be questioning to what extent popular environmentalism has shaped this thinking? Environmental author Bill McKibben (2006) posits, 'All we can do is make it less bad than it will otherwise be' (cited in Marris, 2011, p 55). What an inherently negative and dystopian worldview. Is this feeding anxiety to our kids, and depression in my generation? Surely, doubts should dog all dogmas, especially if they are based on fear, propaganda, discrimination, negativity, romanticism and doomsday forecasts, as the war on weeds is.

I feel it is time for its reform.

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Some inspirational environmentalists, such as the late Jane Goodall, say we have a responsibility to remain 'stubbornly optimistic'. As a pessimist, I totally agree. When confronted with a hopeless situation, it is the heroic course and choice. However, where does the brain fit into this? Should we remain stubbornly deluded about winning an unwinnable war and restoring an imaginary 'nature' unsullied by human history? Or should our stubborn optimism be channelled somewhere else, somewhere more effective, and where could that be?

My personal experience suggests we need to create a less problematic and more positive popular environmental paradigm. One that can accommodate history, Te Tiriti, constant change and unpredictability. One that knows our ignorance and the dangers we pose, yet still allows us to be part of nature, and take up heroic roles for her protection and regeneration. One that fosters positive language, positive thoughts and hope.

Intuition is my compass here. And I feel like I'm on the cusp of something.

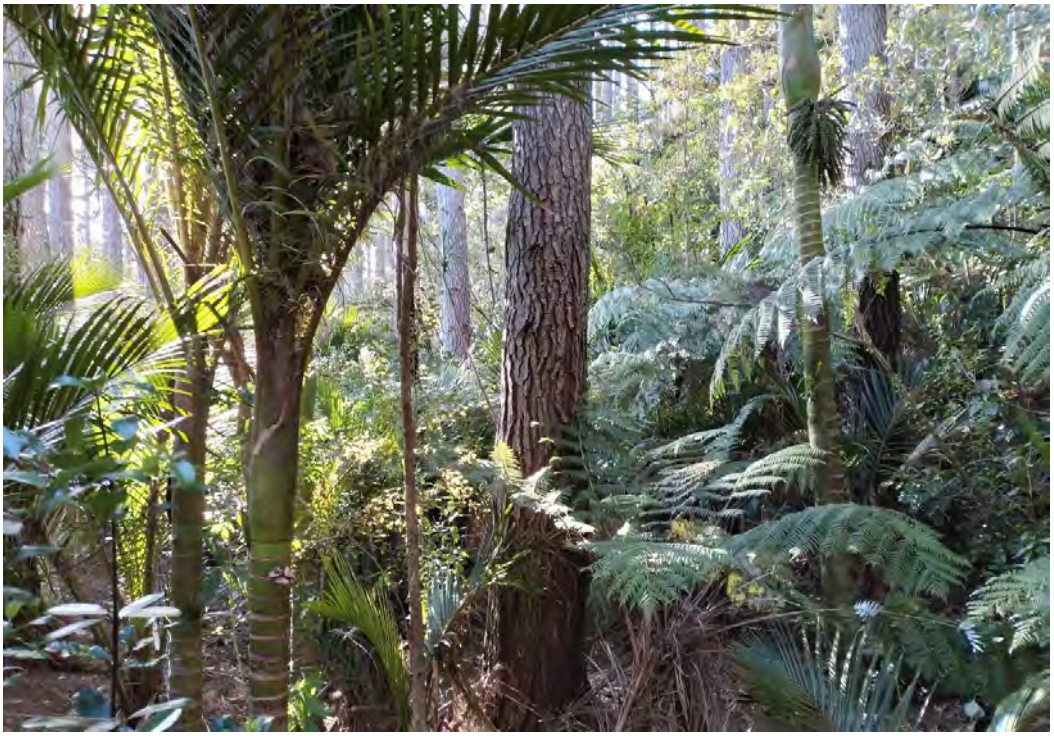

Figure 3. In some pine forests, native understories are regenerating quite well – including seedlings of native canopy trees – but they are not without weed species too (image by author, 2023).

Novel ecosystems

I promised this essay would end optimistically because I do see dots and trails on the horizon, flightpaths of hope to follow. Ideas and terms such as 'novel ecosystems' (Hobbs, Higgs and Hall, 2013), continuous cover or 'close-to-nature' forestry, regenerative agriculture and adaptive management. And papers such as 'A nature-positive future with biological invasions' (McGeoch et al, 2024). These collectively orientate in a new general direction to reconceptualise nature and its practical management. Heads and beaks swing further away from the shoulder. Language veers slightly from nostalgic 'restoration' toward the more open-ended idea of *regeneration* and resilience.

Hinewai Reserve on Banks Peninsula is an example of early inklings. In theory, it was nothing new, just basic forest succession 101. But it proved that working with gorse rather than fighting it can be a successful strategy. This is a small but fundamental mindset shift from all-out-war mode. Mentally, I imagine it was also a far more positive and healthy perspective for the hands-on manager, Hugh Wilson. After more than 30 years, he has neither burnt out nor been defeated – but the gorse has been.

Such ideas can be translated to other situations. A local example for me relates to a Māori whānau (family) trust. A failed pulp-industry venture left their whenua (land) with 50 hectares of wattle forest. These wattles are aggressive weeds and an anathema to the trust's kaitiakitanga. Bulldozing them and replanting with natives was their desire. While I sympathised, I certainly couldn't recommend it. Obliteration now, no matter how intense the rage or weaponry, is simply unachievable. The wattles would resprout thick as a wheat field and quickly choke out any natives planted. But this is a story of hope, where preposterously (again), I'll forecast that one day this whānau may look back at this weed predicament even as a kind of blessing.

My confidence sprouts from observation and theory. From the roadside, their forest is a total monoculture of wattle – an exotic invader. However, within the forest, amongst the leaflitter on the floor, and between the many shrub weeds of the sub-canopy, there is already a multitude of native plant seedlings regenerating. Tōtara, pūriri, tānekaha, taraire, makamaka and even kauri seedlings, along with nīkau, patē and ferns, all appear quite healthy. The wattles are providing a 'nurse-cover' role that would otherwise be performed by natives such as kānuka. Nothing suggests the natives won't chug on up through the understories. This is just the simple and well-accepted process of forest succession. Nothing ground-breaking here. Just the balance of time.

Contentiously, I'll speculate that the wattles even offer some distinct advantages. They are nitrogen fixers, adding fertility to the impoverished gum-land soil. Their wispy crowns let plenty of light in to allow regeneration and seedling growth. Furthermore, the wattles have a much shorter life-expectancy than kānuka. Muscular natives such as tōtara, kauri and pūriri will have no trouble elbowing their shoulders up through the wattles and they will develop clean straight boles as a result. Shade from a mixed native–exotic understory will preclude the regeneration of wattles and ensure a successful transition from a wattle infestation to a new and predominantly native forest.

The significant words in the above sentence are *new* and *predominantly*. While eventually the wattles will mostly be displaced by natives, they still won't be eradicated. They'll always be scrounging around the fringes like a pack of bony dogs, pouncing into any gaps and disturbances such as slips. Nevertheless, working *with* rather than warring *against* these weeds is undoubtedly the only pragmatic option. However, coming to terms with this new and one day *predominantly* native forest, and its novel successional pathways, will require a more accepting and less war-like mindset. Furthermore, maintaining the conceptual dichotomy of native or exotic forest will become increasingly confounding. But isn't that exactly what we are clutching on to so desperately – me included? And probably you too.

My wattle example above is all too conveniently clear-cut and tidy. It still inadequately accommodates weeds that pose a more serious threat to forest succession. However, I only promised an optimistic ending – not a refined solution. The above is encouragement for brave helmspeople to set sail again, to extrapolate beyond the present and popular constellation of 'nature' in Aotearoa New Zealand, to pursue promising currents and to fish up new philosophical bedrock from these murkied waters.

Figure 4. What do we see? The Kaeo riverbed infested with weeds or lush with nature? When neither eradication of environmental weed species nor restoration to native forest in such areas is tenable, coping with this reality requires a new and more robust concept of nature (image by author, 2025).

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I contend that critically evaluating how any such new paradigm deals with weeds in Aotearoa New Zealand will be a useful stress test of adequacy. But this should not be done with a narrow ecological lens. A new environmental paradigm will be an evolving social and cultural construct, and even very indirect and spurious angles of examination, such as congruency with the social sciences, ethics and potential effects on mental health and landscape enjoyment, could all be useful polish.

Ultimately, the war against insurmountable weed problem that is coming to rural Aotearoa New Zealand will be won or lost within our minds.

It's time to weigh the anchors.

About the author

Paul Quinlan lives in the Far North of Aotearoa New Zealand. He is a trustee of Tāne's Tree Trust, convenes the Northland Tōtara Working Group and is a technical advisor with Trees That Count. In these roles he is a promoter of native forest establishment and its sustainable management. He is a qualified landscape architect and a registered member of the New Zealand Institute of Landscape Architecture and the New Zealand Institute of Forestry.

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