Ecological values and cultural significance - should they be combined? An opinion piece

Ko Paula Godfrey tōku ingoa

Ko Tahekeroa te maunga

Ko Kaipara te Moana

Ko Tahekeroa te awa

Ko Tokimatahirua te waka

Ko Ngapuhi te iwi

Ko Te Ihutai te hapū

Ko Chapmans tōku whānau

I am an ecologist specialising in botany and undertook much of my mahi and studies in the North of Auckland. I started in native nursery production and from there went to Massey University and completed a degree in Plant Science and Ecology. I am currently undertaking postgraduate studies in Ecology at Lincoln University.

It has long been established that Māori people have an interconnected relationship with the natural world, which includes Papatūānuku, Mother Earth, and Rangi-nui, God of the sky. This holistic connection with the environment isn't separated between cultural and ecological values, the distinct and separate categories that are so often used today to assess our environment. Māori view ecosystems as a web of communities, blending fauna, flora, water, and air, living in equilibrium within this system, integrated and playing a part within it. This includes the living and non-living, tīpuna/ancestors who have been before them and those who come after/mokopuna.

This concept of integrated holistic views on the environment is not easily understood by the European system, and still today there is much confusion and misunderstanding on how to integrate mātauranga Māori into land management, resulting in the cultural and ecological assessments for developments and land use change to be separated.

I never imagined as a small child growing up that I'd be an ecologist, deciding the fate of trees we drove past, and maybe one day, the very trees I climbed (Fig. 1, p. 13). I grew up surrounded by 180 acres of lush native north Auckland bush, which feels so tropical compared to the bush remnants around Canterbury. All the large kauri trees (*Agathus australis*) had already been logged, but the ridgelines were still dominated by younger trees and rickers. Rimu (*Dacrydium cupressinum*), taraire (*Beilschmiedia tarairi*) and kohekohe (*Didymocheton spectabilis*) were dominant. Several large pūriri (*Vitex lucens*) trees grow throughout the property, one of which had my younger sister's whenua (placenta) buried underneath it (Fig. 2, p. 14). We spent hours harvesting kahikatea (*Dacrycarpus dacrydioides*) berries for jelly and between-meal snacks, and making huts from kānuka (*Kunzea robusta*) and nīkau (*Rhopalostylis sapida*) leaves to camp in out the back of the whenua.

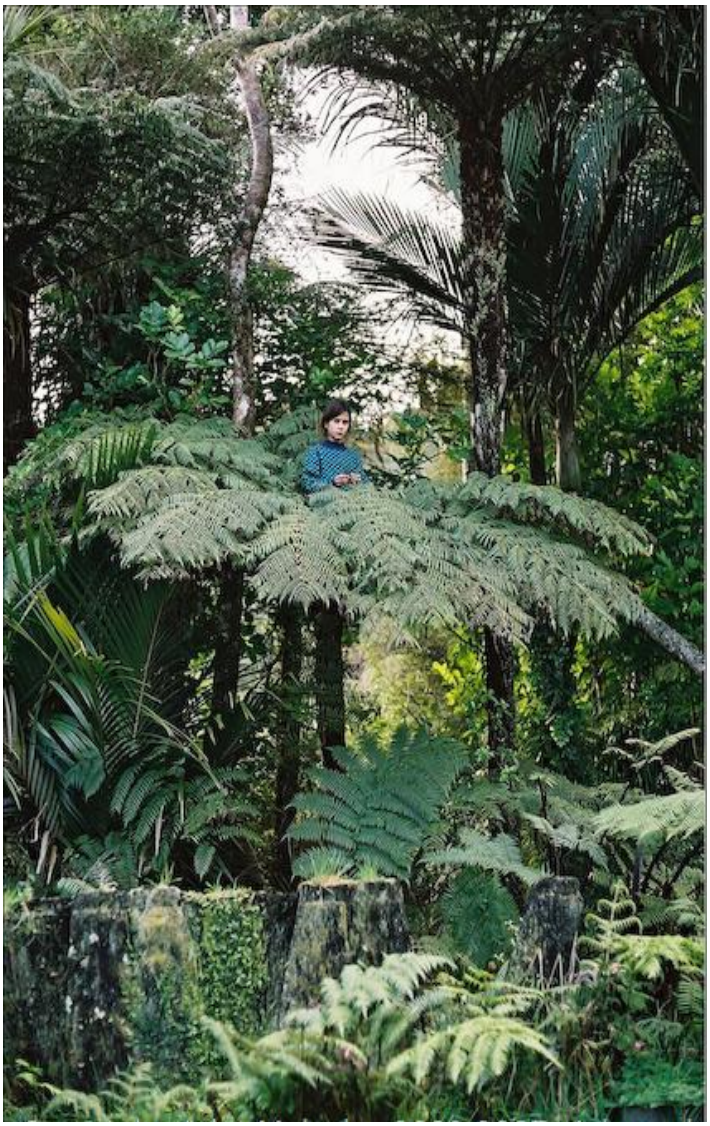

Figure 1. Myself as an 8 year-old sitting in my favourite ponga. Photo by John Malcom with permission.

As an ecologist working in botany, I get asked all the time what my favourite tree/plant is, and the answer changes depending on what's looking particularly beautiful that week. Are the kōwhai (*Sophora* spp.) flowering? Have the kauri got new growth? Has the māhoe (*Melicytus ramiflorus*) produced another bumper crop of beautiful purple berries? These are the factors that influence my answer. The connection I have with the plants is not purely assigned to an ecological value but relies on the history I have with those plants and the meaning they hold for me, my whānau, and my hapū/iwi. This is where blending cultural and ecological values together really comes into play.

Take for example the pūriri tree. Pūriri has significant ecological value and is often my favourite tree. It produces flowers almost all year round for tūī to feed on, and kererū to eat its berries. It even hosts NZ's largest moth species, the bright green pūriri moth (*Aenetus virescens*). These trees are impossible to age, as the old specimens have hollow trunks and twisted hard wood, making traditional ageing techniques very difficult. It's thought pūriri are the longest living plant in New Zealand.

In addition to the *ecological* values of pūriri, pūriri also has significant *tangata whenua* (Māori) values. For as a Ngāpuhi (Northland iwi within the pūriri distribution area), I have a strong emotional connection to pūriri that is intertwined with its ecological value. How can that be?

Well, pūriri is used as an infusion to wash tūpāpaku (bodies of our deceased) and to adorn them with pūriri leaves as they decompose. Kawakawa leaves are also commonly used. The bones are later gathered up and scraped clean, then placed within the pūriri tree in a kete. Although this burial technique is no longer practised these days, we simply adorn them with pūriri and bury them in Papatūānuku. Thus, cutting down a pūriri tree would for Māori be like digging up a church cemetery without exhuming the bodies first for Europeans. In many instances clearance would happen without or before notifying the living relatives of those who potentially lay there.

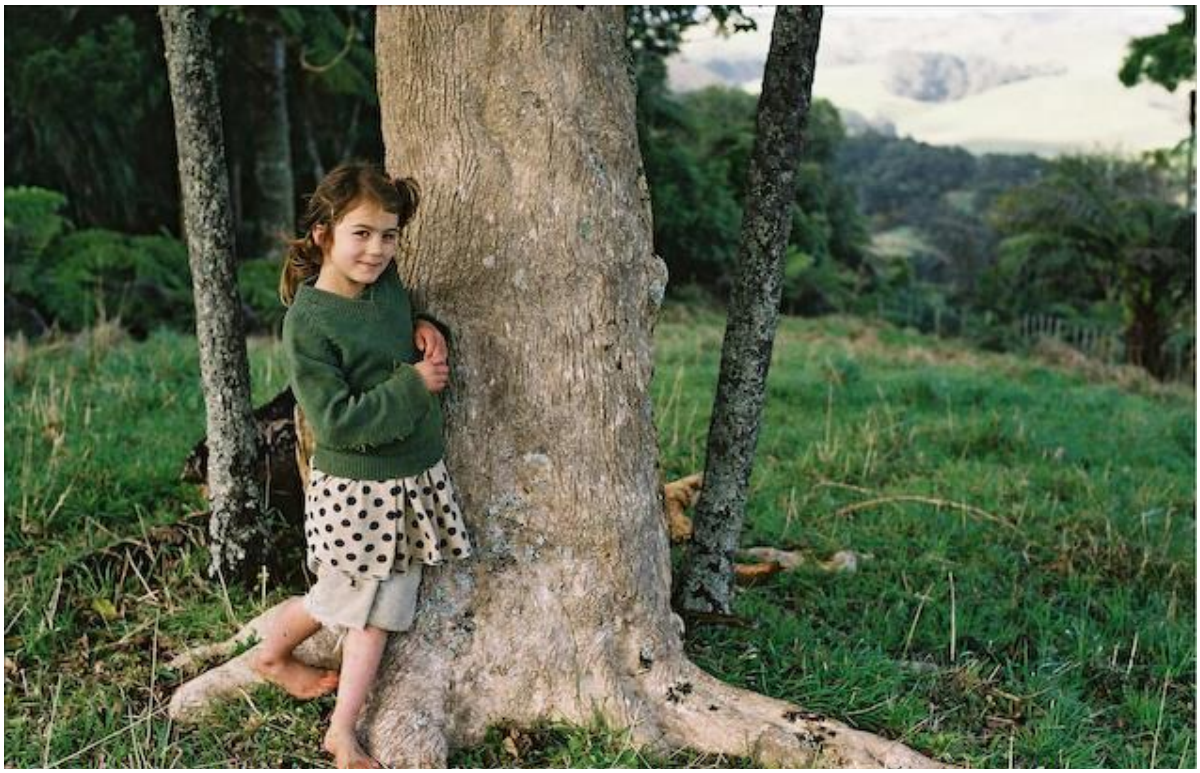

Figure 2. My sister Angela with her pūriri tree, under which her whenua is buried. Photo by John Malcolm with permission.

The issue of Māori values and the environment has been brought to media attention (again) last year with the new marina works in Pūtiki Bay, Waiheke Island, and the 2020 protests over Ihumātao, the historic stonefields in Auckland, which was en route to becoming a major housing development. (Although Ihumātao was not a specific environmental issue, environment and ecology are undeniably intertwined.)

Pākehā and Māori have long held differing views on the values of our environment, which have led to contentious issues throughout the colonising history of New Zealand. Māori value the earth as a precious gift and follow strict rules on kaitiakitanga through kaitiaki (looking after) our environment to receive the life-giving resources it provides. Pākehā people might tend to view the whenua (land) as a resource ripe for exploitation, and therefore could value the whenua for its potential monetary output more highly than the existing environmental and cultural values that it can hold. This can be a point of much conflict between land developers and tangata whenua (local Māori).

There is a recommendation to include tangata whenua rights in Assessments of Effects (AEEs) as per the Fourth Schedule within the Resource Management Act 1991, but in practice, they are kept as separate documents, with no cross-over between cultural effects and environmental effects. How can AEEs integrate tangata whenua rights as part of an ecological assessment and fulfil the principles of the Treaty of Waitangi?

Recognition of kaitiakitanga (guardianship) in the AEEs when it comes to the identification of potential environmental impacts is important for achieving better environmental outcomes for all. The environmental values are interconnected with the mauri (essence/life force) of the area and link spiritual, genealogical, cultural and physical values. Recognition of kaitiakitanga in AEEs (because it's respected within tikanga Māori cultural practice), cannot be defined by local councils or government as that would mean they are speaking for kaitiakitanga, which is reserved for tangata whenua to speak to.

Ensuring that the proposed development area will be able to be sustainably used for future generations and even mahinga kai (food gathering) is a meaningful environmental outcome that demonstrates that the environment will retain its mauri.

So, it's more important than ever to carry out pre-project consultation with tangata whenua groups (iwi, hapū, rūnanga) and listen to what they have to say about their environment without dismissing it as wishy-washy rubbish. The real environmental outcomes are achieved when the kōrero (conversation) is received with a learning mindset, and tangata whenua recommendations are implemented.

If cultural values and ecological assessments were integrated, those hundred+ year-old pūriri trees would be here to stay and developments would be more sensitive to the environment. If cultural considerations had been implemented even 50 years ago, we would have a much more natural environment and many more trees to climb in our neighbourhoods (Fig. 3).

He tao huata e taea te karo, he tao na Aitua, e kore.

The thrust of a spear shaft may be parried, that of Death never.

Figure 3. Paula at work at Pūkaha, circa 2018. Photographer unknown.