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He Taonga Kē Ngā Kaumātua: Kaumātua Perspectives of te Taiao, Ngahere and Taonga Species

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ABSTRACT. Māori cultural beliefs, values and practices are intimately connected to te taiao, the natural environment. While te taiao is of unique cultural significance, contemporary Māori live in diverse realities, so beliefs, values and behaviour cannot be viewed through a singular lens. Within Māori society, older Māori are often referred to as kaumatua, who are valued by their communities for the intergenerational transfer of knowledge and afforded respect and recognition. Consequently, kaumatua perspectives of te taiao, including how it has changed during their time and considerations for the future, are important for informing Māori understandings of the environment. Using a wānanga-based approach (using meetings centred on Māori social or political issues and knowledge), we obtained the perspectives of a group of kaumatua from the Horowhenua region, who discussed their perspectives of te taiao. Four key themes were constructed from the wānanga: remembering our old people, remembering our childhood, the present, and the future. We discuss these themes in the present article and reflect on their implications for enhancing and informing initiatives focussed on biosecurity protection of taonga (heritage) species in Aotearoa New Zealand.

Keywords: indigenous psychologies; Māori; environmental perspectives; Indigenous worldviews; taonga species

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Introduction

Hoki whakamuri kia haere whakamua. (Reflect on the past to move forward.)

Kaumātua

In Māori society, older Māori are often referred to as kaumatua, a term not specific to a particular gender but rather encompassing both men and women. Upon reaching kaumātua status, a sense of leadership is both placed upon and expected of kaumātua within their given communities (Cram, 2016; Durie, 1999b; Dwyer, 2012; Edwards, 2010; Waldon, 2004), likely due to their ability to enrich those communities with their knowledge (both cultural and non-cultural) accumulated over time. Kaumātua teachings are therefore valued as important for the intergenerational transfer of knowledge, affording kaumātua respect and recognition of high social standing. Inherent within kaumātua status is the reflected mana and integrity kaumātua hold as iwi (tribal) representatives (Durie, 1999a).

Age, then, confers whānau, community and cultural commitments and expectations by Māori communities for older Māori (McDonald, 2016), rather than a reduction in responsibilities commonly associated with age in Western discourses of aging. A growth in responsibilities and expectations places kaumātua as key support systems within their whānau, making them treasured taonga within Māori society (Dulin et al., 2012; Dyall et al., 2013; Dyall et al., 2014; Oetzel et al., 2019; Waldon, 2004). As a result of holding these important roles, a sense of fulfilment and self-worth can be derived, contributing to the positive experience of aging. Accordingly, older age and kaumātua status are valued and respected within a te ao Māori (Māori world) worldview.

Diverse realities

When attempting to describe how kaumātua relate to te ao Māori, the complex interaction of socio-historical factors, contemporary realities and colonisation need to be taken into consideration. This is due partly to the fact that some older Māori were not immersed in Māori cultural practices and beliefs throughout their lives (Durie, 1995). A range of reasons can be proposed for this non-engagement given Aotearoa New Zealand's colonial history and ongoing colonisation (Bennett & Liu, 2018; Butcher & Breheny, 2016; Hokowhitu et al., 2020; Wood, 2017), the depth of which will not be discussed in this article. However, the associated consequences are complex and vast, at times reflected by some older Māori

choosing not to connect with their Māori cultural identity. Some were not given the opportunity or exposure to te ao Māori during their childhood/early adulthood. Others were likely punished for engagement in te ao Māori, experiences likely to carry over into adulthood and later life. There were also those who were able to engage and hold strong to their Māori cultural identity despite the many challenges faced throughout their lifetime to date. Consequently, not all older Māori may feel like they have the cultural capacity or skill base to fulfil the position of cultural leadership expected within the role, such as that of a kaumātua (Edwards, 2010). Others may not have the desire to uptake such a leadership role. Indeed, it may be assumed that engagement within te ao Māori is not experienced consistently or homogeneously across all Māori, and Māori, therefore, experience diverse realities (Durie, 1995; Durie, 1999b; Waldon, 2004; Wood, 2017).

Indigenous connection to the environment

To preface this section, it is well-recognised by many academic scholars that Indigenous peoples are not a homogenous group, rather they hold distinctive characteristics which reflect their understandings of the world (Durkalec et al., 2015; Ford et al., 2020; McGregor, 2004; Salmon, 2000; Tassell-Matamua et al., 2020; Wright, 2013). Yet there are arguably some shared commonalities across groups that help us understand Indigenous perspectives, at least at the surface level, including the basis of a holistic and interdependent worldview (McGregor, 2004; Salmon, 2000; Tassell-Matamua et al., 2020; Wright, 2013). For example, the Mayans people trace their ancestry to corn plants, while trees have been described as sources of origin by Abenaki and Lenape peoples (Caduto & Bruchac, 1995; Salmon, 2000). Māori share similar notions of ancestry, relating to the emergence of humanity from the whenua, a word meaning both land and placenta. What informs this perspective of holism can be heard through pūrākau, traditional narratives of primordial times that are passed down through generations. These narratives are a form of intergenerational knowledge transmission specific to the particular groups that are sharing them.

There is, in general, a shared cosmological understanding that the existence of all lifeforms, including the universe, evolved through the actions of primordial beings and deities who conferred on humans the responsibility of care and respect for and reciprocity with all sentient beings (Carroll, 2014; Dwyer, 2012; Wright, 2013). An example of this from te ao Māori is the pūrākau of Papatūānuku, the earth-mother, and Ranginui, the sky-father, the primal parents of the world, giving way to their children, the atua, or the deities of the natural environment. Descending from these forces is all life on Earth, including humanity, imbued with mauri (lifeforce) (Cowie et al., 2016; Gallhofer et al., 2000). This understanding of humanity's place in the environment informs the obligation to maintain the wellbeing of the environment. The natural environment may then confer a place of both material, physical and spiritual sustenance, informing an Indigenous connection to the land.

Anecdotally, connection to the taiao has been passed on to generations of Māori through pūrākau and is inherently linked to Māori values and beliefs. What this sense of connection looks like in the contemporary context has been explored in scholarly literature. Recent research by Tassell-Matamua et al. (2020) explored contemporary understandings of environmental connection for Māori, finding greater cultural affiliation linked to positive regard for the environment. They further explored the degree to which various cultural identity facets related to environmental connection, socio-political consciousness was found to be associated with environmentalism, whilst interdependent self-concept was related to environmentalism, appreciation of nature, and environmental identity. Similarly, findings exhibited by Cowie et al. (2016) located environmental regard in Māori political consciousness, suggesting value placed upon the environment may not be easily separable from past land confiscation, nor can it be viewed isolated from Māori political aspirations for self-determination, at least within the presented studies. A further study by Lockhart et al. (2019) found socio-political consciousness to be associated with protecting the environment. Notably, in contrast to the previous studies, spirituality held a positive association with valuing unity with the environment, providing insight into a complex and nuanced understanding of what environmental regard means for Māori.

Other research has explored the role the environment plays in relation to identity through the meaning of place. Place can take on many forms and interpretations depending on the group defining the term. As such, place may be interpreted as an inert, geomorphic, physical location. Other interpretations may embrace a perspective of an entity in its own right encompassing a history, a physical reality, spirituality and connections to both the past ancestors and present and future generations. This sentiment is shared by Kana'iaupuni & Malone (2006), who delineate a shared energy that flows bilaterally between people and place interacting with and impacting each other. Butcher & Breheny (2016) have similarly found the concept of place holds resonance for older Māori through the sustenance it can yield. Sustenance includes food and water provision, housing security, access to land and cultural connection. The nourishment land provides for one's spirit has been found to have positive flow-on effects on people's overall wellbeing (Dwyer, 2012). Indeed, it may be assumed the environment functions as a core component of Indigenous identity.

This notion of the environment being of significance to Indigenous peoples can be seen in various analogies or models exploring wellbeing. Within the Te Whare Tapa Whā model designed by Sir Mason Durie (1984), for individuals to actualise hauora (health or wellbeing), they must have balance across multiple facets of health, including physical, mental, emotional, spiritual and environmental. Similarly, Salmon (2000) expressed the notion of balance between the physical, social, spiritual and mental components of health in order to maintain the hau (breath of life). The significance of this balance extends beyond the breath of the people but rather influences the life force within all sentient beings. This framing

inextricably links all sentient beings together in a network of interconnection, therefore implying that the health and wellbeing of one are connected to the health and wellbeing of the other.

The summary above, by no means exhaustive, provides a foundational understanding of Indigenous and, in particular, Māori connection to the environment. As has been detailed, Māori are not a homogenised group and can hold varying perspectives and lived realities, which contrasts with discourse within the environmental realm homogenising Māori engagement and interactions with the environment. Māori stewardship has been critiqued and argued to be grounded in economic underpinnings (Jones, 2005); others have described Māori connection to the environment as overly romanticised and rather one of exploitation grounded in an anthropocentric paradigm (Gillespie, 1998). Key to these debates are the differences in philosophical understandings of environmental ethics, in which some people see the protection of the environment as eliminating or at least minimising human contact altogether, while others have lived functioning within the environment for many years.

Currently, the appetite for Indigenous knowledge in its own right and to challenge Anglo-European understandings (Wood, 2017) is increasing. A resurgence of various forms of Indigenous knowledge and practice is experiencing heightened interest. This study builds on previous work investigating the relationship between Māori identity and pro-environmental attitudes and behaviours, as well as extending our understanding of what the taiao means to Māori through the lens of kaumātua. The aim of this study is to centre and explore kaumātua narratives in order to understand the values and beliefs they give to te taiao, the ngahere (forest) and taonga species.

Method

Participants

Seven kaumātua provided consent to participate in the focus group. Purposive sampling was utilised, whereby participants were selected based on the researcher's acquaintanceship networks. Of the seven kaumātua, two were tane (men) and five wahine (women), all located in the rohe of Muaūpoko (on the Kapiti Coast of Aotearoa|New Zealand).

Procedure

Kaupapa Māori methodology was employed in this study. Kaupapa Māori theory can be understood as a philosophical approach to social change, whereby research is conducted by Māori as Māori for the advancement of Māori (Smith, 1997). For this particular study, the research group was invited to interview an established group of kaumatua based in Levin. A relationship based on trust and respect was established through whānau and other acquaintance networks. While Kaupapa Māori theory does not prescribe a method, wānanga, 'hui (meetings), practices, recitals, or discussions where the subject matter is not always centred on Māori

social or political issues and knowledge,' have traditionally and continues to be used by Māori to engage in knowledge construction and transmission (Mahuika & Mahuika, 2020, p. 371). Therefore, this approach befits the purpose of the current research.

Data analysis

The focus group was audio and video recorded and then transcribed by a member of the research team. Data was then input into Miro, which hosts qualitative data analysis. Inductive thematic analysis was conducted. Investigator triangulation was employed where three members of the research team were present at the focus group, and a fourth member was not, yet, together, they discussed and critiqued the findings until there was consensus that the data appropriately represented the group.

Results

Four key themes were identified by kaumātua.

Our old people: Fond memories of their elders' relationships with the ngahere described by kaumātua

They tended to reflect upon observations witnessed of their elders engaging with the ngahere and described them as being intimately connected and affording great respect and care to the ngahere. The ngahere was considered a place of physical sustenance for a healthy life, where teachings and practices of collecting kai (food), such as eeling and foraging berries, and flax weaving were common, alongside a place of spiritual sustenance, where activities were shrouded in tikanga (practices) such as chanting, karakia (prayers) and making offerings. These practices and rituals performed by elders were not always understood by the future kaumātua at the time; however, they identified their purpose as likely due to Māori ontological beliefs about atua (deities) being ever-present:

> The koroua [elderly man] that brought me up, the bush to his generation, … was the pharmacist, the chemist, the pastor, the kai.
> My grandfather used to take food up to the bush for ancestors up there.
> She would always walk in and chant to the big flax bushes, and I'm standing there wondering what the hell she's doing!

An overall belief that our old people had not only love and respect for the ngahere, but also a revered sacredness for it through a spiritual connection, was a key message expressed in this theme by the kaumatua:

> My grandfather, who grew up in the North, and would take us kids there. And he said to us kids you go over there by that tree … and wrap your arms as far around that tree as you can and tell me that you hear … feel the wairua in that tree.

Our childhood: Childhood memories of ngahere and te taiao

Kaumātua reflections on their childhood included experiences of both te taiao and ngahere. Many expressed not being consciously concerned about te taiao as children. However, everyday experiences ensured engagement with te taiao on a daily basis. Some expressed a sense of freedom to engage in activities that provided a sense of connection with te taiao. While others noted a sense of restriction or prohibition felt in relation to te taiao in some circumstances. However, there was a sense their elders helped navigate spaces and provided spiritual safety for a carefree childhood. Some clear memories of personal connection with the ngahere were expressed, as well as some clear memories of utilising knowledge of te taiao in practical ways:

> When I was young, I would say that I wasn't aware of environmental things or how important it was to look after, you know, the awa [river] … or the whenua [land].
> When I was a child growing up, we used to all hate going to Waikato. [… T]he whole environment to me was very tapu [sacred].
> I think because we didn't have any tapu put on us, we grew up in that era, in that environment. We had such a freedom.
> It was the kererū [wood pigeon] that would tell you where to go to get those berries. You just watch them all land in the forest.

Overall, a key area of focus expressed by kaumātua in the theme 'our childhood' was that it was a time of being carefree and where immersion in and engagement with te taiao was a daily occurrence:

> One of the joyous things I remember as a young child going to school was running through this little section of bush…. I used to jump up and hit the branches and touch the leaves … that wairua [spiritual] connection.

The present: Perspectives on the wellbeing of ngahere and te taiao

Increased awareness of the environment was expressed by kaumātua, evoking feelings of concern and emotions for te taiao and ngahere. Te taiao was considered more important now than ever before in life. This was recognised as a change in perspective from the lack of concern in childhood. At times, the attention given to the environment was all-consuming. Concern was expressed about the loss of Indigenous ngahere and its replacement with pine. As well as the devastating effect of possums on taonga species. The effect this loss of ngahere has had on human wellbeing was highlighted:

> As I've gotten older… the environment, environmental perspectives and issues have become more important.
> Our forest has changed. The pine trees … you know, that's quite a complex issue.

> In recent years, you cannot see the rata trees in a lot of our forest because they've been killed by possums. And so, they devastate the forests.

Kaumātua recognised their growing concern for te taiao, and ngahere has come about with the changes they have witnessed over time. As the coverage of ngahere continues to decline for various reasons and is replaced by non-native species, the effects on human wellbeing are considered:

> Tōtara, kahikatea, big trees … came right down to the edge of the lake.… [P]eople would have been well spiritually and mentally in those days. You know today we've lost that, so we're mentally not well … spiritually lacking….

The future: Concerns about and aspirations for coming generations

Te taiao as a holistic entity, along with an urgent desire to ensure the wellbeing of te taiao for future generations, was strongly expressed by kaumātua. Conversations about the future were heavily focussed on mokopuna (grandchildren}. Initially, a theme of regret was strongly expressed, mostly about mokopuna not having an obvious connection with te taiao. Regret was also expressed through sadness about not passing on knowledge about te taiao from their elders, as well as not exposing their own children to knowledge about and experience with te taiao:

> My mokopuna know very little about tikanga me kawa Māori [Māori practices and protocol]. They've never seen any of the stuff I saw. I feel sad about that.
> Our old people used to chant, and they were very good at it. That's what's lacking. We don't teach our young.
> I wish I brought my kids up in that too, 'cause my kids will have learned a lot.

Drivers of awareness and care for te taiao in the future are strongly linked to mokopuna. Kaumātua expressed the urge to make changes to their own practices as a way of modelling respectful behaviour toward te taiao, as well as re-generating te ao Māori practices that are embedded in wairuatanga (spirituality). Overall, the future is about ensuring te taiao is taken care of for future generations, and this involves a holistic approach to viewing and enacting sustainability for te taiao. What we do now is about what we need for our mokopuna in the future.

Discussion

Our findings suggest kaumātua have a revered understanding and connection to the taiao developed over time by observing, learning, reflecting and engaging with their tūpuna (ancestors) – both human and non-human entities. This holistic understanding of the world, where there is an interconnection between people, the environment and sentient beings, is understood widely by Indigenous peoples across the globe (Arnold et al., 2021) as well as the local Aotearoa New Zealand

context (Cowie et al., 2016; Harmsworth & Awatere, 2013; Lockhart et al., 2019; Tassel-Matamua et al., 2020). A whakapapa (genealogical) framework helps to locate this understanding of relativity between human and non-human entities based on Māori epistemological assumptions. Adeptly detailed by Mahuika (2019, p.1), whakapapa is 'the process of layering one thing upon another,' or, in other words, articulated as a 'living' genealogical framework (Ataria et al., 2018), that exists beyond the constraints of physical or biological boundaries but, rather, extends through time and space. Given the premise that whakapapa is not constrained by biological or physical boundaries and the ontological assumptions that all life forms come from the same primordial beings, a shared ancestry between humans and all that encompasses the natural world seems logical.

The discourse surrounding kaumātua elders' engagement with te taiao reflected a strong connection to their environments beyond physical ties to a place they have lived for some time, rather deriving from a spiritual nature, as detailed in their practices of karakia, chanting and making offerings. This finding aligns with one of the many important values derived from a te ao Māori worldview, that of kaitiakitanga (guardianship). Kaitiakitanga can be understood as the protective acts undertaken by guardians towards their environment, or 'environmental guardianship' (Harmsworth & Awatere, 2013; Roberts et al., 1995). Being guided by kaitiakitanga and acting in a way that maintains the wellbeing of the environment is an expected responsibility conferred to humankind as a result of a shared ancestral connection (Roberts et al., 1995). Exact behaviours or measures put in place that make up 'environmental guardianship' were specific to each iwi, hapu or whānau (tribe, subtribe or extended family) group; however, there was a common underlying assumption that kaitiaki (guardians) acted in ways that were culturally appropriate and maintained respectful relationships between all descendants (Roberts et al., 1995). It should also be noted the role of kaitiaki was not perceived as solely for humans, but rather the relationship was seen as reciprocal, and atua (the various spiritual beings associated with Māori spirituality) were often viewed as kaitiaki of the people, in turn. Thus, the practices carried out by kaumātua elders may be understood as behaviours grounded in kaitiakitanga, in a manner of preserving balance within the system and demonstrating an obligation of respect and care towards all sentient beings.

Interestingly, the discourse within the theme of kaumātua 'childhood' demonstrates an implicit shifting in the social norms and behaviours of Māori society at the time. Kaumātua reflect on the sense of freedom they experienced during their childhood and, in particular, the lack of tapu (prohibitions) placed on them. Pre-1840 Māori society engaged in tikanga that functioned primarily on tapu and noa (release from prohibitions) to, amongst many things, guide behaviours. Mead (2016) conveyed the interplay between tapu and noa as vital for the wellbeing of the individual and people as a collective. Similarly, Durie (2003) described how the existence of tapu and noa functioned to ensure the survival of the whānau, arising as large groups of Māori began occupying a then-new

environment (Aotearoa) and were required to learn what were safe and risky behaviours of the time. Seemingly, as time passed and the threat to survival induced by a new environment began to ease, it is thought tapu and noa took on a new form, still linked to survival and governing social conduct but more closely aligning to consequences of a spiritual nature and facilitated by tohunga (Durie, 2003). Over time, it was thought that people, objects, places held a tapu that, when broken, exerted substantial consequences, such as those of a spiritual nature, to both the individual and their whānau. Kaumātua observed their elders enacting this tikanga as children, but also reflected the same rules surrounding tapu were not always inflicted onto them. In addition, kaumātua reflected on the reduction in intergenerational teaching of chanting and various traditional tikanga Māori being passed on to their children. Conceivably, this may illustrate the changing social structures Māori faced at the time as a result of Pākehā colonisation and the impact this had (and continues to have) on their ways of being, language, belief systems, health and wellbeing, land governance and so forth (Barnes & McCreanor, 2019).

Our findings highlight a key emotional reaction – one of concern, kaumātua expressed towards the environment, grounded in the changes they have witnessed in the whenua of Aotearoa New Zealand over time. This reaction of concern may arise due to a multitude of factors, not all of which can be discussed here; however, a few key points will be touched on. The first is likely due to the changing environmental landscape that has transpired over kaumātua' life-span to date. Changes to the landscape in Aotearoa New Zealand have occurred in many forms and have been described as 'environmental concerns' or 'environmental degradation.' To name a few examples: the modification of landscapes to better suit the economic benefits of the growing primary industries; water pollution due to a range of factors including sewage, sediment run-off, various pesticides and chemicals and deforestation (Forster, 2016; Harmsworth, 1997). Globally, this phenomenon of environmental degradation has been and is still occurring, resulting in mass loss of ecosystem biodiversity (Kealiikanakaoleohaililani & Giardina, 2016). Many of the decisions that gave rise to these environmental concerns were undertaken without Māori consultation or engagement (Harmsworth, 1997), which has since seen attempts at rectification through the Resource Management Act and policies aligned with it (Forster, 2016; Kanwar et al., 2016). The implications of this degradation cannot be viewed through an environmental lens alone, rather, through the philosophical understanding of a shared ancestry between all living beings, which extends to the physical, mental/emotional, social and spiritual wellbeing of Māori.

Secondly, the loss of native forest cover also holds implications for systems of knowledge generation and transmission. Exposure to the natural environment and constant engagement provided a space for matauranga Māori to be learnt and passed on by means of immersive practices. Jones (2009) exemplifies this through the practice of traditional kererū harvesting by Māori and the methods that were deemed culturally appropriate, as specified by the hapū or iwi. Further, as touched

on at various points through kaumātua discourse, wairua was/is a common everyday experience within their realities. Wairua, the 'spiritual dimension of existence' (Valentine et al., 2017, p. 65), was common to kaumātua' lives with good reason, as each human being has their own wairua that provides them with the sensitivity to the wairua of all living things. The respect and care afforded to te taiao through the actions of kaumātua elders supports the idea that the various entities in te taiao are living and have a wairua, as is thought by other Indigenous peoples across the globe (Gallhofer et al., 2000). Despite the challenges faced by Māori as a result of an introduced colonial system of environmental management (Forster, 2016), wairua remains an inherent part of many Māori individuals' lives (Lindsay et al., 2020), as well as traditional Māori knowledge and knowledge transmission practices. As kaumātua reminisce on their childhood experiences and express concern for the lack of knowledge shared to date, they uphold a sentiment that has lasted the tests of time in reaffirming the value matauranga Māori (Māori knowledge) has for contemporary issues and, importantly, for the generations to come, despite current colonising discourse questioning its legitimacy and relevance (Ataria et al., 2018).

Like many other Indigenous groups, mokopuna, or the future generations, were at the forefront of kaumātua aspirations for the environment. A similar sentiment is shared by other Indigenous groups who frame their decision-making and behaviours as an obligation of responsibility to the future generations (Kealiikanakaoleohaililani & Giardina, 2016; McGregor, 2014) or to the seven generations ahead (Clarkson, et al., 1992). This principle often underpins the responsibility Indigenous peoples feel towards the environment to protect and preserve it for generations to come. Likewise, kaumātua recognise the importance of ensuring matauranga Māori and practices embedded within this knowledge system are more readily available for the coming generations to inherit. This philosophy of engaging with the environment centres on the experiences and lessons learnt from tūpuna and subsequently passed down through the generations (Harmsworth & Awatere, 2013). The whakatauki (proverb) 'he mokopuna piri poho,' a grandchild held close, reflects the intimate bond inherent in kaumātua and mokopuna relationships (Husband, 2020). This sense of obligation to future generations is reflected in kaitiakitanga (Harmsworth & Awatere, 2013; Roberts et al., 1995) and ensures that the environment is not only physically preserved and protected, but the connection to one's ancestral roots is retained for future generations to understand who they are and where they come from (Pihama et al., 2021). Therefore, the premise that environmental actions or decisions should consider the impact on future generations would seem logical.

Moreover, our results support the understanding that contemporary Māori deeply revere the environment. This perspective contrasts with some of the discourse in environmentalism, which disputes the connection Māori have to the environment and describes it as overly romanticised and/or founded in economics (Gillespie, 1998; Wood, 2017). While Māori are not a homogenous group and

experience what it means to be Māori differently (Durie, 1995; Durie, 1999b; Waldon, 2004), our findings align with other authors who acknowledge that Māori have an intimate connection to te taiao (Cowie, et al., 2016; Harmsworth & Awatere, 2013; Lockhart et al., 2019; Tassell-Matamua et al., 2020) that extends beyond physical sustenance or economic profit. Further, kaumātua provide invaluable perspectives on te taiao, as they are generally viewed as beacons of intergenerational knowledge within Māori society (Durie, 1999a).

Kaumātua have a revered understanding of te taiao, the ngahere and taonga species because of their intimate childhood experiences and learnings accumulated over their lifetime, from witnessing their elders engaging in karakia, chanting and making offerings to their own experiences watching, playing and being immersed in the natural environment. The teachings and lessons of kaumātua are invaluable and can provide key insights into how the current management of the environment could be improved.

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