

# TE MANU HUNA O TE PŌ

# The kākāpō's cultural legacy

# Moana Murray\* Linda Waimarie Nikora<sup>†</sup>

#### Abstract

The kākāpō, a nocturnal parrot native to Aotearoa New Zealand, embodies resilience and rarity. Once found across the country, this taonga species is now critically endangered, threatened by habitat loss and predators, and requiring major conservation efforts. This article is an attempt to retrieve mātauranga Māori about the kākāpō by exploring its role in cosmology, material culture and oral traditions. Our search of the literature, mōteatea and waiata archives, and museums resulted in very few references of central interest to this study. Most references concerned the kākāpō's decline and conservation. References of note were Elsdon Best's detailed account of the bird's ecological, cultural and material significance as a taonga species; a rare waiata tangi collected by George Grey in which the composer mourns the loss of a child; and the kahu kākāpō in Perth Museum, the only known example of its kind. In response to the limited references to kākāpō, a waiata tangi composed by the first author is used to discuss our results and as a model for revitalising knowledge and memory.

Climate change poses substantial challenges to the survival of the kākāpō, including disruptions to essential food sources and habitat. These challenges mirror the historical upheavals faced by Māori and the natural world. To address these threats, adaptive strategies must prioritise not only the conservation of kākāpō and other threatened species but also the revitalisation of mātauranga Māori, reaffirming its significance in safeguarding this taonga species.

#### **Keywords**

biodiversity conservation, cultural heritage, kākāpō, mātauranga Māori, mōteatea, taonga species

#### Introduction

The kākāpō (*Strigops habroptilus*), a nocturnal, flightless parrot endemic to Aotearoa New Zealand, occupies a central place in ecological and cultural narratives. Critically endangered, with fewer than 250 individuals remaining, the kākāpō's decline exemplifies biodiversity loss in Aotearoa, a nation with one of the highest rates of threatened species globally (Bradshaw et al., 2010). Beyond biology, the kākāpō is a

<sup>\*</sup> Ngāpuhi. MA student, Te Whare Wānanga o Waikato, University of Waikato, Hamilton, New Zealand. Email: moanamurray1@gmail.com

<sup>†</sup> Te Aitanga-a-Hauiti, Tühoe, Rongowhakaata. Professor, Indigenous Studies, Waipapa Taumata Rau I University of Auckland, Auckland, New Zealand.

taonga deeply interwoven with Māori cosmology, material culture and traditions.

This article examines Māori mōteatea and waiata, archival literature, and museum artefacts to uncover the kākāpō's historical and cultural significance. By engaging with these sources, the research highlights the importance of Māori perspectives in enriching conservation narratives and practices.

#### Kākāpō decline

The kākāpō, also known as tātarapō, tarepō and kākātarapō (Moorfield, n.d.), was once widely distributed across Aotearoa, as evidenced by subfossil records and early observations (Brunner, 1848; Reischek, 1884; Scarlett, 1979; Williams, 1956). These nocturnal, flightless parrots thrived in dense forests and scrub from the North Island to the South and Stewart Islands (Best, 1942). However, the arrival of humans, mainly British colonial settlers, alongside introduced predators such as rats, stoats, ferrets and cats, devastated kākāpō populations. Habitat destruction, predation and hunting drove the species to the brink of extinction by the late 20th century.

The alarm was raised in the 1970s when naturalists and conservationists, including Don Merton, recognised the kākāpō's precarious status (Clout & Merton, 1998; Eason et al., 2006). Kākāpō, primarily from Fiordland, were relocated to predator-free offshore sanctuaries such as Whenua Hou (Codfish Island) and Pukenui (Anchor Island). These efforts established the foundation for intensive management strategies, integrating habitat restoration, genetic intervention and community engagement (Department of Conservation, n.d.).

#### **Recovery strategies**

Scientific research, particularly in genomics and reproductive biology, has significantly advanced kākāpō recovery efforts. A comprehensive study sequenced the genomes of 169 kākāpō, representing nearly the entire population as of early 2018. This genomic dataset enabled researchers to evaluate genetic diversity, identify traits linked to chick growth and disease susceptibility, and predict breeding behaviours to guide conservation strategies (Guhlin et al., 2022; Savage et al., 2020). Innovative monitoring techniques, such as analysing environmental DNA (eDNA) from soil samples, now enable detection of kākāpō and other vertebrates without disturbing them. These methods also enable individual identification, providing valuable tools for conservation efforts (Urban et al., 2023).

Studies on the genetic basis of feather colour polymorphism in kākāpō suggest these colours may have evolved to help the birds evade now-extinct avian predators. Understanding these evolutionary dynamics sheds light on genetic diversity and informs future conservation strategies (Urban et al., 2024).

Major research initiatives addressing habitat destruction and introduced predators include relocating kākāpō to predator-free islands, restoring native vegetation crucial for their diet and nesting, and establishing fenced, predator-free mainland sanctuaries such as Sanctuary Mountain Maungatautari (Elliott et al., 2001; Innes et al., 2019). Habitat studies have highlighted the species' preference for dense forests and fruiting trees, guiding targeted restoration efforts (Innes et al., 2019). However, climate change threatens the availability of these kinds of habitat and critical food sources such as rimu tree masts, and adaptive management strategies are required (Eason et al., 2006). Despite these advancements, maintaining predator-free environments remains an expensive and significant challenge.

# Community engagement and public awareness

Conservation efforts have heavily emphasised public awareness, community engagement and policy support. As a national icon, the kākāpō has inspired campaigns and funding initiatives highlighting its cultural and symbolic value while increasing public awareness (Seabrook-Davison & Brunton, 2014). A central component of these efforts is the Kākāpō Recovery Programme's Facebook page (Kākāpō Recovery, n.d.), which has become a key platform for informing the public and fostering global engagement. The page provides regular updates, including breeding season highlights, individual kākāpō health reports and insights into the recovery team's work. The platform has cultivated a dedicated community of supporters by combining informative posts with interactive features such as Q&A sessions and live streams. This digital presence raises awareness and motivates action, such as donations, volunteer participation and advocacy for conservation policies.

Documentaries have further amplified public awareness and support for kākāpō conservation. Early films such as *The Edge of Extinction* (Harraway, 1976) documented initial relocation efforts to predator-free islands, while *To Save the Kākāpō* (New Zealand Geographic, 1998) highlighted the first population increase in over a century. Recently,  $K\bar{a}k\bar{a}p\bar{o}$  Crisis (1News, 2019) and Brave New Wilderness (Stash—Free Documentaries, 2024) have captured the ongoing challenges and successes of conservation efforts, playing a pivotal role in mobilising public engagement.

#### Historical and cultural significance

From a Māori perspective, understanding the kākāpō's historical and cultural significance is a vital component of conservation efforts. Acknowledging Ngāi Tahu as tangata whenua of those islands that serve as sanctuaries is a crucial step in recognising their cultural and ancestral connection to the kākāpō. The Ngāi Tahu Deed of Settlement (New Zealand Government, 1997) formalises this relationship by ensuring Ngāi Tahu's involvement in key policy decisions regarding the bird's protection, management and conservation, including a dedicated seat on the Department of Conservation's Kākāpō Recovery Programme. While this collaboration is significant, it marks only the beginning of a broader opportunity to integrate Māori cultural narratives into kākāpō conservation and public awareness initiatives.

The kākāpō has been recognised as endangered for nearly 200 years, a period during which intergenerational Māori knowledge about the species has significantly diminished. This decline highlights the urgency of retrieving archival records, examining museum collections and engaging with oral traditions to restore the kākāpō's place in contemporary consciousness before this knowledge fades further.

Central to this effort is examining waiata and moteatea such as those collected by scholars in the 1800s and early 1900s. These records may contain references to ecological elements-flora, fauna and landscapes-offering insights into the kākāpō's role in the lives of Māori. Studying kākāpō-related artefacts in museum collections could further reveal the bird's cultural significance and historical human-environment interactions. Items such as kākahu adorned with kākāpō feathers might reveal the bird's role in Māori material culture, while hunting and captivity tools could provide clues about traditional practices, including adaptations to the kākāpō's nocturnal and grounddwelling behaviours. These artefacts may also shed light on seasonal patterns, habitats and the species' historical range. Moreover, their geographic distribution could indicate trade networks (Coutts, 1969), inter-iwi relationships and the bird's broader significance.

Collaborative research with Māori weavers and knowledge holders could connect these artefacts to oral histories and traditional practices, enriching cultural understanding and supporting conservation initiatives that honour the kākāpō as a taonga species. This study seeks to explore the archives and invigorate the kākāpō's historical and cultural significance, ensuring its legacy endures.

#### Method

This study involved accessing public archives, including literature, artefacts and textiles, to uncover insights into the kākāpō's significance. The process began with networking and collaboration with archivists, librarians, conservationists and researchers to identify and locate relevant materials. The University of Waikato Library served as the primary source, particularly its extensive New Zealand and Māori collections.

Key scholars included George Grey (1885), Elsdon Best (1942) and Edward Shortland (1980). Apirana Ngata's (1874–1950 with Pei Te Hurinui Janes and Hirini Mead) collection of mōteatea and waiata, Ngā Mōteatea, stands out for its rich metaphors and references to native species. We also examined the works of James Cowan (1870–1943) and Te Rangi Hīroa (Sir Peter Buck) (1877–1951) as potential sources of references.

The University of Waikato Library also houses the Pei Te Hurinui Jones manuscript collection, which is particularly significant because Jones was the principal translator of mōteatea and waiata collected by Apirana Ngata and published in the *Ngā Mōteatea* series (Ngata & Jones, 2004; Ngata et al., 2004). The Pei Te Hurinui Jones collection also includes artefacts acquired and gifted to Jones during his lifetime, providing access to tangible taonga that may offer valuable insights into kākāpō.

Harlow and Thornton's (1986) index is an essential resource for exploring and searching  $Ng\bar{a}$  *Mōteatea*, given that it is not available electronically. Additional searchable online collections, particularly for older texts, include Index New Zealand, Papers Past and the New Zealand Electronic Text Collection.

The research process began with a systematic desk search of the library's catalogue, using keywords such as "kākāpō", "manu pō", "te manu huna o te pō", "manu ngaro", "te manu a Tāne", "native birds", "Māori birds", "forest lore" and "ecology". We refined the results through filters for subject, author and publication date. We recorded call numbers to locate physical materials and then reviewed them for references to the kākāpō. Interlibrary loans enabled us to access additional content for unavailable resources. This systematic approach ensured a thorough search for references to the kākāpō within the library's holdings. We applied a similar approach to online materials, where we found that electronic word and phrase searches proved remarkably effective.

Te Whare Taonga o Waikato Museum & Gallery was the only institution visited in person; all other searches were conducted through online catalogues and collections. These included Te Papa Tongarewa, Auckland Museum, Canterbury Museum and Tūhura Otago Museum. Online international searches extended to the British Museum and Perth Museum. References to the kākāpō were identified in the catalogues of these institutions, and records were retrieved and analysed for their relevance to the study's focus.

#### Findings

The overall outcome of the search for references to the kākāpō's historical and cultural significance was marked mainly by an overwhelming silence, except for three notable discoveries described below.

#### Māori narratives

We found Elsdon Best's (1942) Forest Lore of the Maori to be the most comprehensive description of the historical and cultural significance of the kākāpō in te ao Māori. Drawing on knowledge from his Tūhoe informants, Best (1942) describes the bird's ecology, traditional hunting practices, and the use of snares and trained dogs (Black, 1922). Best notes, as do White and Hamilton (1925), the kākāpō's inability to fly, its diet of forest fruits such as rimu, hīnau, tawa berries and fern root, and its green plumage, which provided effective camouflage.

Best also highlights the kākāpō's presence in recorded oral narratives. In his retelling of the story of Raumahora and Takarangi of Taranaki (circa 1740), Best (1927) describes how Ngāti-Tuoi gifted kākāpō plumes to Raumahora during a visit to her village, Whakarewa. These plumes were part of a broader exchange of prestigious items, including cloaks and weapons, as the tribe sought to honour Raumahora's exceptional leadership, hospitality and kindness. Hata and Fletcher (1917) document a similar narrative. However, our search revealed that references to the kākāpō in collected narratives are generally limited and appear primarily in contexts where the kākāpō is incidental to the main events or themes of the story. Our review of titles by James Cowan (1930) and Buck (1949) resulted in no further references.

#### Mōteatea me ngā waiata

The Ngā Mōteatea series and Ko nga Moteatea, me nga Hakirara o nga Maori (Grey, 1853) were thoroughly examined for references to kākāpō. Combined, this extensive archive, comprising over 500 mōteatea, waiata and karakia, is a critical repository of Māori oral history. While rich in references to native birds, only one entry specifically mentions the kākāpō. As found in Grey (1853, p. 329), a waiata tangi, composed by an unknown author, mourns the loss of a lastborn child. The kākāpō is invoked as a metaphor not just for loss but also for preciousness.

Key imagery in the waiata tangi draws parallels between the kākāpō's ecological characteristics—its rarity, soft green feathers and elusive nature—and the irreplaceable qualities of the child and relationship being mourned. Specific phrases include "huruhuru kākāpō", referencing the bird's prized feathers; "taku manu huna i te pō", evoking its nocturnal and secretive nature; and "Te Whatu o Poutini", a link to cosmogenesis and a metaphor for pounamu, reflecting the bird's colour, rarity and value as a taonga. These connections deepen the symbolic weight of the kākāpō, linking its place in the forest to the enduring value and cherished memory of the deceased.

This lone waiata tangi underscores not only the kākāpō's symbolic significance but also its concerning absence from the broader Māori oral chant record, reflecting another layer of mourning—one of cultural erosion and the diminishing of collective memory. Nevertheless, other memory triggers persist within pūrākau and whakapapa, preserving connections to the bird's legacy.

#### **Museum collections**

In Aotearoa, museum collections hold various kākāpō-related items, including biological specimens such as taxidermy mounts, skeletons and DNA samples. Historical documentation, including collector notes, illustrations, and photographs, provides valuable insights into the bird's natural history and early conservation efforts, highlighting the kākāpō's struggle for survival. Aside from a reference to kākāpō feathers interwoven into a kahu kiwi at Te Papa Tongarewa (Kahu kiwi, 1850–1900), no significant catalogue references to other kākāpō-related artefacts were found during our museum searches.

Although it is not housed in a museum, Simmons (1967) offers a detailed professional analysis of a 17th-century cloak made from kākāpō pelts excavated from a burial cave at Lake Hauroko. This cloak remains in situ, safeguarded by an iron grille installed in 1967 with the approval of the Murihiku Tribal Executive.

Internationally, the most significant item identified is a kāhu kākāpō housed in the Perth Museum and Art Gallery, Scotland. David Ramsay collected the cloak in the early 1800s and donated it to the Perth Literary and Antiquarian Society in 1842 (Tamarapa et al., 2022). This cloak is of exceptional importance as the only known kāhu kākāpō in existence in a museum. Its presence in Scotland highlights historical exchanges during the colonial era and raises critical questions about the preservation and ethical stewardship of Indigenous cultural artefacts in international collections.

The findings from the search reveal the kākāpō's profoundly limited presence across Māori oral traditions, early scholarly records and museum archives. While the overall lack of references to the bird's historical and cultural significance is striking, the few that do exist affirm its status as a much-treasured taonga. From Elsdon Best's detailed ecological observations and references to a poignant waiata tangi collected by George Grey, the kākāpō emerges as a symbol of rarity, preciousness and survival. Despite the sparse representation of kākāpō-related artefacts in museum collections, important biological taonga and historical records have been preserved. Among these, the kāhu kākāpō housed in the Perth Museum stands out as a singular, irreplaceable artefact, reflecting both the bird's ecological significance and its deep cultural resonance.

### Discussion

In response to the limited references to kākāpō, this discussion is centred on a waiata tangi composed by the first author. This composition aims to address the gaps in the mōteatea and waiata

	KEI HEA RĀ K	OE, E KĀKĀPŌ?		
He Waiata Tangi Nā Moana Murray				
1	Kei hea rā koe, e kākāpō?	Where have you gone, kākāpō?		
2	Te manu kura huna i te pō	The hidden bird of the night		
3	Mai i a Tāne-tikitiki-o-Rangi	Descendant of Tāne-tikitiki-o-rangi		
4	Mai i a Tū-mata-mata-ika	Of Tūmata-mata-ika		
5	Mai i a Tā-whiri-mātea e ī	Of Tā-whiri-mā-tea		
6	He hoa i riro mai i te pakanga	An ally earned in the battle		
7	o Te Rangi-kaupapa, Ko Pekapeka,	Te Rangi-kaupapa		
8	Ko Pōpōia ngā haumi i Rarohenga, e!	Alongside Pekapeka and Pōpōia, in the depths of Rarohenga		
9	Ka uhi te põuri ki õ huruhuru	Grief wrapped in your feathers		
10	He mārō kakara mai i a Poutini	A fragrant mārō brought forth from Poutini		
11	Mauria e Pāpā mō ake tonu e ī!	You remain in Pāpā's grasp forever		
12	Me te puāwai huarangi rimu	Like the flowering of the rimu berry		
13	whāioio anō hei oranga	You will once again flourish		
14	Mai rānō e tangi ana kākāpō e!	From our long-ago past, the kākāpō call will be heard once again!		
15	Koukou te rūrū, ketekete kākā, hou hou te kākāpō!	The rūrū calls, the kākā laughs, the kākāpō sings!		

records while providing a model for revitalising knowledge and memory—an urgent need for kākāpō and other extinct or threatened species.

We begin our discussion by fully presenting the waiata tangi with an accompanying translation. This genre mobilises metaphor, imagery and cosmological references that demand explanation. We do this in sections that highlight and discuss the issues that each stanza seeks to address. They are (a) scarcity of direct references to the kākāpō in archival materials, (b) the kākāpō's symbolic and relational significance within Māori cosmology, (c) the bird's cultural value as evidenced in material culture and (d) patterns of inclusion and omission in archival records. The section ends with a discussion of the study's limitations and areas for future research.

# Kei hea rā koe, e kākāpō? | Archival absences

Kei hea rā koe, e kākāpō? Te manu kura huna i te pō Mai i a Tāne-tikitiki-o-Rangi Mai i a Tū-mata-mata-ika

The first stanza of the waiata tangi opens with a poignant question: "Where has the hidden bird of the night gone?" The near-total absence of references to the kākāpō in mōteatea and waiata records prompts speculation. Were mentions of the bird deliberately omitted, or did they exist in oral traditions that were never transcribed? The kākāpō's nocturnal habits and rarity may have made it a less accessible subject for lyrical commemoration than more visible birds such as the ruru or kākā. Alternatively, could the bird's symbolic meanings have been subsumed under more general terms for manu, such as "kākā", or embedded in metaphors that elude contemporary interpretation?

By the time colonial ethnographers and historians began recording Māori oral traditions in the 19th century, the kākāpō population was already in critical decline. The knowledge shared with Elsdon Best by his informants in the late 1800s was often inherited rather than based on firsthand experience because few had ever encountered a kākāpō. This decline likely contributed to the bird's limited representation in the chants and oral traditions recorded during this period, reflecting its diminished presence in everyday life and cultural memory.

Yet, waiata referencing long-extinct birds continue to be composed, even in modern times. For example, "He tangi mō Te Momo", composed by Ahumai, references the moa and conveys profound desolation with the phrase "ko te huna i te moa; i makere iho ai te tara o te marama" (Ngata & Jones, 2004, Vol. 1, Song 41), as do Songs 181 (Vol. 2) and 206 (Vol. 3). A more recent example is the widely known "Tōku reo, tōku ohooho", composed by Okeroa Huriwaka and Te Tawhiro Maxwell, and first performed by the Ōpōtiki Mai Tawhiti kapa haka group in 2022. This composition urges the preservation of te reo Māori to prevent its extinction, drawing a powerful parallel with the disappearance of the moa.

The disparity in references to the moa compared with the kākāpō or other extinct birds, such as the huia (Ngata et al., 2004), Songs 182 (Vol. 2) and 218 (Vol. 3), may be attributed to symbolism. The moa, extinct by 1445 CE because of overhunting, is iconic as a metaphor for extinction, serving as a cautionary tale of human impact and thus gaining prominence in compositions. Additionally, the focus of early settler scholars like George Grey often prioritised content that aligned with their interests, such as pre-Christian practices, potentially overlooking other aspects, including references to the kākāpō. It is also possible that Māori were strategic in sharing knowledge, choosing to withhold or provide incomplete information in specific contexts. Regardless of the explanation, these historical record gaps remain frustrating and unsettling.

## Te ao Māori | Māori cosmology

He hoa i riro mai i te pakanga o Te Rangi-kaupapa, Ko Pekapeka, Ko Pōpōia ngā haumi i Rarohenga, e!

Whakapapa presents the scaffolding upon which millennia of history are remembered and retold. The second stanza references the cosmological battle of Te Rangi-kaupapa, the final battle between Tāne-te-wānanga and Whiro. As a battle of epic proportions, the kākāpō, along with pekapeka and pōpōia, became the companions of the fallen as they journeyed to the afterlife, symbolising the profound relationship between the living, the departed and the natural world. This pūrākau is retold in Best (2005, p. 398).

In the cosmogenesis of the world, after separating the primal parents, Tāne adorned his mother, Papatūānuku, with trees, plants and vegetation, creating forests and covering the land in life. Birds in te ao Māori are also linked to Tāne and Tūmataika, a deity associated with kākā and potentially other parrot species, in turn, situating kākāpō as a relational being (Best, 1982; Brougham & Reed, 2001, p. 15). Because manu descend from deities such as Tane and Tumataika, while humans trace their lineage through Tane and Hineahuone, manu are regarded as tuakana or senior to humans. References to kākāpō, whether in pūrākau, moteatea and waiata or artefacts such as woven taonga, are all a reminder of our relationship and connectedness to our broader ecological context. The critically endangered status of kākāpō presents a stark reminder of the need to uphold our ethical responsibilities towards the bird as part of a more significant commitment to environmental stewardship. That most of the literature, moteatea and waiata, and museum catalogue references to kākāpō concern enlivening this taonga species bodes well for its future.

#### He maro kakara | Material culture

Ka uhi te põuri ki õ huruhuru He maro kakara mai i a Poutini Mauria e Papa mõ ake tonu e ī!

This stanza highlights the significance of the kākāpō in Māori material culture, particularly its feathers and pelts. The final line reflects the bird's ground-dwelling nature and underscores the earth's essential role as a source of physical, spiritual and cultural sustenance.

The references we reviewed tell us that the bird's feathers were sought after to adorn and ornament clothing and instruments such as pūtātara (Andersen, 1934). Its pelts were used to make wāhine maro (Stack, 1996), its feathers were a special koha by themselves (Best, 1927), and they increased the prestige of kākahu and items they were woven into. Like other birds, they were sought after as an important food source, requiring knowledge of their ecology, life cycles, behaviours and habitats (Best, 1942). Once abundant and central to material culture and practices, the bird's decline has since rightfully led to its protection as an endangered species. This shift from sustenance and adornment to conservation reflects a change in traditional practices and an embrace of kaitiakitanga practices. Now cherished as a taonga, its survival symbolises the collective effort to protect biodiversity and sustain the natural world. Despite these changes, the bird's cultural and symbolic significance endures.

# Whāioio ano | Decolonising conservation efforts

Me te puawai huarangi rimu whāioio anō hei oranga Mai rānō e tangi ana kākāpō e!

The last verse in "Kei Hea Rā Koe, e Kākāpō" is a call to action.

Recent advancements in kākāpō conservation have significantly bolstered efforts to protect this critically endangered species. Comprehensive genome sequencing has provided crucial insights into the kākāpō's low genetic diversity, enabling targeted strategies to enhance breeding success (Dussex et al., 2021). Additionally, the reintroduction of kākāpō to mainland sanctuaries, such as Sanctuary Mountain Maungatautari, represents a pivotal step towards establishing self-sustaining populations in diverse habitats (Department of Conservation, n.d.). Technological innovations, such as using drones for radio-tracking, have revolutionised monitoring practices, enabling efficient tracking of multiple birds across challenging terrains (Wildlife Drones, n.d.). These innovations enhance kākāpō survival by improving genetic health, expanding habitats and enabling less effortintensive monitoring and management. Even so, perhaps there is an important contribution to be made by te ao Māori.

A te ao Māori approach reframes conservation through tikanga, pūrākau and kaitiakitanga, emphasising interconnectedness, spiritual significance and cultural restoration. A conservation framework must also acknowledge the waning presence of kākāpō in Māori life due to colonisation, habitat destruction, introduced predators and law changes that severed Māori access to the species. Restoring the kākāpo's place in Māori cosmology requires revitalising moteatea and waiata, pūrākau, and symbolic representations, ensuring these are preserved and expanded within Māori and broader public discourse. Decolonising conservation means addressing these historical disruptions, centring Māori participation, and integrating ecological, cultural and spiritual dimensions to restore the kākāpo's significance and to foster intergenerational knowledge and cultural empowerment. This includes building out existing educational initiatives in learning institutions and promoting Māori-framed campaigns that message not just to the general public but especially to Māori. Māori need to see that public messaging values the contribution of Māori cultural and historical narratives.

### Hou hou te kākāpō! | Restoration through creative praxis

Koukou te rūrū, ketekete kākā, hou hou te kākāpō!

The final line of the moteatea sounds the mating call of the kākāpo alongside other birds such as rūrū and kākā. When performed, this onomatopoeia progressively slows in pace so that listeners can experience the sounds these birds make.

This waiata is a heartfelt tribute to the kākāpō, embodying both reverence for the bird as a cherished ally and a vision of hope for its thriving future. It acknowledges the kākāpō's deep connection to the natural world and its symbolic role within Māori cosmology and cultural heritage. Through its verses, the waiata honours the bird's enduring spirit, unique characteristics and place as a taonga, enriching the relationship between humans and the environment. At the same time, it serves as a call to action, urging collective efforts to ensure the kākāpō's survival and restoration. By weaving together respect, remembrance and aspiration, this waiata stands as a reminder of the responsibility to uphold kaitiakitanga and safeguard the natural world for future generations.

#### Conclusion

The limited references to kākāpō in this study likely reflect the context in which mōteatea and waiata were collected and documented, as well as the perspectives of those involved in the process. Additionally, many mōteatea and waiata remain preserved in iwi and hapū archives or artefacts in regional museums and private collections, which fall outside the scope of this research. These repositories present valuable opportunities for further exploration. Engaging Māori knowledge holders and technologists—such as experts in karakia, weaving, tā moko and taonga pūoro—could uncover new dimensions of kākāpō narratives and revitalise the bird's presence in Māori traditions.

Another explanation for the limited references in moteatea and waiata is the gradual erosion of memory and awareness over time, leading to the bird's exclusion from new Māori compositions and narratives. This trend must be reversed. The Te Matatini kapa haka festival, with its wide-reaching platform, offers a transformative opportunity to elevate the kākāpo's presence in contemporary Māori consciousness, aligning ecological conservation with cultural expression in deeply Māori ways.

Involving more Māori kaitiaki communities in conservation efforts is essential for restoring the

kākāpō to the collective consciousness and adapting to contemporary environmental challenges. Aligning these efforts with the bird's original distribution honours the ancestral connections between Māori and this taonga species. Providing dedicated opportunities for Māori to fulfil their kaitiaki responsibilities revitalises traditional practices, integrates tikanga into environmental stewardship and reinforces the kākāpō's cultural significance. This approach fosters intergenerational knowledge sharing and positions the kākāpō as a powerful symbol of resilience in both ecological and cultural contexts.

Finally, climate change presents significant challenges to the survival of the kākāpō, including disruptions to vital food sources such as rimu mast cycles. These threats echo historical disruptions experienced by Māori and the natural world during colonisation and ecological degradation. Adaptive strategies must, therefore, prioritise not only the conservation of the kākāpō but also the invigoration of cultural activities that reaffirm its significance as a taonga species. Efforts to restore its habitat and ensure its survival must be paired with revitalising cultural practices such as composing moteatea, creating kakahu, and incorporating the bird's story into educational and artistic expressions. These integrated approaches honour the kākāpō's place within the cultural and ecological landscapes of Aotearoa, ensuring its booming call resonates once again as a symbol of resilience, unity, and the enduring relationship between Māori and their environment.

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### Glossary

hapū	subtribe	
huna	nocturnal	
huruhuru	feather	
iwi	tribe	
kahu	cloak	
kaitiaki	guardian; custodian over natural resources	
kaitiakitanga	guardianship	
kākā	parrot	
kākahu	cloak	

kapa haka	a group that performs traditional Māori dance, song and chants	Best, E. (1982). Maori religion and a P. D. Hasselberg. https://nzetc. scholarly/tei-Bes02Reli-t1-body-	
karakia	prayer, chant, incantation	Best, E. (2005). Maori religion an	
koha	gift, token	Te Papa Press.	
manu	bird	Black, G. J. (1922). A Māori dog-skin The Journal of the Polynesian	
maro	a woven garment worn	59–63.	
	around the hips	Bradshaw, C. J. A., Giam, X., & So	
mātauranga Māori	Māori knowledge	Evaluating the relative environ	
mōteatea	chant	countries. <i>PLoS ONE</i> , 5(5), Artic doi.org/bhvsqr	
ngaro	extinct	Brougham, A. E., & Reed, A. W. (200	
pekapeka	bat	of Māori proverbs: Te kohikohi	
pō	night	<i>Reed.</i> Reed Publishing (NZ) Ltd	
pōpōia	owl	Brunner, T. (1848). Journal of an interior of the Middle Island, Ne	
pounamu	greenstone, nephrite	1848. In N. M. Taylor (Ed.), Earl	
pūrākau	foundational stories	Zealand (pp. 257-320). Clarend	
pūtātara	conch shell trumpet	Buck, P. H. (1949). The coming of	
ruru	morepork, owl	<ul> <li>Purposes Fund Board; Whitcomb nzetc.victoria.ac.nz/tm/scholarl g1-t2-body1-d2-d2.html</li> <li>Clout, M. N., &amp; Merton, D. V. (1 kākāpō: The conservation of peculiar parrot. <i>Bird Conservat</i> 8(3), 281–296. https://doi.org/c5</li> </ul>	
tā moko	the process of tattooing the face or body done under traditional protocols		
Tāne-te-wānanga	deity of knowledge		
tangata whenua	first people of the land	Coutts, J. F. (1969). Merger or take the effects of contact between Eu	
taonga	treasured object; (species) highly treasured native plants or animals	in the Foveaux Strait Region. 7 Polynesian Society, 78(4), 495– jstor.org/stable/2070466	
taonga pūoro	musical instrument	Cowan, J. (1930). The Maori: Yest	
tawa	Beilschmiedia tawa	Whitcombe and Tombs Limit victoria.ac.nz/tm/scholarly/tei-0	
te ao Māori	the Māori world	d1-d10-d2.html	
te Pō	the realm of night	Department of Conservation. (n.d.).	
te reo Māori	the Māori language	New Zealand Government. Re	
tikanga	customs	21, 2024, from https://www.doc. kakapo-recovery/	
tuakana	elder sibling	Dussex, N., van der Valk, T., Mora	
wāhine	women	C. W., Díez-del-Molino, D., vo	
waiata	sing, song, chant	Y., Kutschera, V. E., Guschan Phillippy, A. M., Korlach, J., I	
waiata tangi	lament, song of sorrow	W., Pelan, S., Mendes Damas, J.	
whakapapa	genealogical ties	Hastie, A. R., Formenti, G., &	
Whiro	deity of darkness	Population genomics of the crit kākāpō. Cell Genomics, 1(1),	

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