

Department of Conservation Te Papa Atawhai

Advocacy Guide for North Island Kōkako (Callaeas wilsoni)

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What is 'advocacy'?

In the context of species conservation, 'advocacy' means raising the profile of a particular species, together with the ecosystems to which it belongs, and encouraging people to gain understanding and appreciation of the species, its role, and the challenges it faces, in order to gain support for conservation.

1.0 Introduction

The North Island $k\bar{o}kako$ recovery plan 1999-2009¹ identified advocacy as an important part of the recovery programme. It recognised that, although $k\bar{o}kako$ conservation is the statutory responsibility of the Crown (through the Department of Conservation), everyone can be actively involved; public involvement is important in sustaining the programme.

Since that plan was published, kōkako conservation has been remarkably successful. The goal of 1,000 pairs by 2020 had been exceeded by 2014, and the number of populations with over 50 pairs has increased. This success has been accompanied by a great deal of advocacy activity for and around kōkako by the groups and institutions involved in kōkako conservation. While it is impossible to measure the impact of all this activity, there can be no doubt that it helps to raise the public profile of kōkako and, if it is done well, encourages support for kōkako conservation and conservation in general.

The Kōkako Recovery Group (KRG) have produced this guide to help those involved in kōkako advocacy to make the most of opportunities and get the best results from their advocacy activities.

2.0 Why produce a kokako advocacy guide?

Since advocacy for and around kōkako is already taking place, and since the recovery programme has achieved considerable success, is an advocacy guide necessary? There are several reasons why it is useful to issue such a guide at this time:

- Government spending on conservation has declined. This could endanger the success of the kōkako recovery programme by making standards of protection difficult to sustain. In such circumstances, it is as important as ever to sustain and increase public support for kōkako and conservation in general.
- The Department of Conservation (DOC), following radical restructuring, now seeks to achieve conservation goals by encouraging non-governmental organisations (commercial and voluntary) to do an increasing portion of the work. Thus there is a wider range of groups that would benefit from advice on advocacy.

- Many of the groups and individuals currently and potentially involved in kōkako recovery might not have the right kind of knowledge and experience to practice kōkako advocacy well. A guide will help to fill this gap.
- A guide can help to standardise the messages being conveyed through kōkako advocacy to ensure that they are appropriate, constructive and do not undermine the recovery programme in any way.

Advocacy is a very broad field of activity, potentially involving a very wide range of organisations and individuals, each of which will have their own priorities and concerns. This guide will enable and encourage a consistent approach, creating a single 'hymn sheet' from which all kōkako advocates can sing, though in their different voices.

3.0 Who is this guide for?

The potential audience consists of all organisations and individuals currently involved in kōkako advocacy or who might become involved in future. They include:

- DOC, who are responsible for public conservation lands and who either manage kokako habitats directly or have agreements with groups who manage or help to manage them.
- Government research institutions (such as Landcare Research) and universities, which engage in research on species and associated ecosystems and which may generate and disseminate new knowledge.
- Local authorities who manage sites which hold kokako or hope to do so in future.
- Local groups, including iwi and volunteer organisations, which manage and/or support sites which hold kōkako or which might do so in future.
- Environmental NGOs (such as Forest and Bird) which campaign for conservation in general and for the protection of particular sites and species.
- Captive institutions (such as the zoos), which either hold kokako or hope to do so and/or which advocate for native species conservation as part of their work.
- Educational institutions (such as schools, colleges, universities, libraries, information centres and museums) which might engage in kokako research and/or advocacy for native species conservation.
- Elected representatives in local, regional or national government who might be sympathetic to, and willing to advocate for, native species conservation.
- Potential sponsors and fundraisers who might wish to educate the public about their involvement in conservation.
- Private individuals with a personal interest in kōkako or native wildlife in general and who might help spread the conservation message.

For all such potential advocates, guidance on what to say about kōkako, the kinds of messages that can be conveyed and how to convey them, can be a valuable resource.

4.0 Advocacy and science

Species recovery programmes and conservation programmes in general are governed mainly by principles of ecology and biology. When advocacy is done well, it should raise public understanding of the scientific basis of conservation, but to do this it often uses mechanisms which might appear incompatible with, or at least different from, scientific practice, such as engaging people's emotional attachment to individual animals (such as the kākāpō Sirocco), or emphasising the sensory dimensions of natural experiences (the beauty of a flower, the music of birdsong). One of the most powerful advocacy devices in the history of conservation is the title of Rachel Carson's book, *Silent Spring*, which highlighted the impact of agri-chemicals on bird populations. By evoking the image of a world without birdsong, it gave people a glimpse of a future they wished to avoid.

Although the language of science and the language of advocacy can appear to be at odds with each other, conservation is at its most effective when they work in tandem. Science provides the knowledge base for conservation programmes, while advocacy provides the social, cultural and political backing which such programmes need. Advocacy encourages and enables people to care – it gives them reasons to care. The result, if it works well, is more funding for conservation (through sponsorship and donations and subscriptions to conservation NGOs), a stronger volunteer force (essential when government resources for conservation are declining), and an electorate that is better informed about and more inclined to be in favour of conservation.



Onlookers, including a TV cameraman, anticipate the public release of a kōkako at the Ark in the Park, a pestcontrolled area within the Waitakere Ranges Regional Park. Kōkako had been absent from the area for over 80 years when they were reintroduced in 2009.

5.0 Key messages for kokako advocacy

Kōkako advocacy can perform two main functions:

- It can raise the profile of kokako, and the ecosystems to which they belong, with the aim of increasing support for their recovery,
- It can use kokako as a vehicle for advocating broader conservation goals and values, with the aim of increasing support for conservation in general.

The following key messages therefore focus both on the birds themselves and on their potential as ambassadors for New Zealand native fauna and flora, and for wider environmental values. The list is not exhaustive or definitive. Its purpose is to suggest reasons why people should care about kōkako, by highlighting how their presence enriches our environment. For advocacy purposes, messages need to be simple and straightforward and must not be misleading; where they refer to scientific knowledge, they need to be accurate.

5.1 Kokako are unique, ancient and interesting

North Island Kōkako belong to a family (*Callaeidae*, New Zealand wattle birds) that is endemic to New Zealand and is assumed by many scientists to have evolved from ancestors inhabiting the ancient continent of Gondwanaland. They could thus be seen as founding members of New Zealand's biota.² Four other species are known; two of these – the North Island and South Island saddleback/tieke – are, like the North Island kōkako, classified as 'At risk – recovering'.³ The huia is extinct and the South Island kōkako, classified as 'Data deficient',³ might also be extinct. Nothing like them exists anywhere else in the world. Contrary to what the English name (blue-wattled crow) suggests, they are not closely related to crows. They exhibit a suite of behaviours and features which makes them fascinating to observe and study; their squirrel-like ability in forests, compensating for their poor flight, the way they use their feet as 'hands' when feeding, their extraordinary voices, their evolutionary history, etc.

5.2 Kōkako are beautiful

The simple combination of three colours – grey, black and blue – is striking and attractive. In certain lights the blue of the wattles is intense, as are their dark eyes, highlighted by the black mask. Their movement, as they bound through the trees or glide downwards on short rounded wings, is elegant and efficient (though they can look comical when they run along the ground).

5.3 Kokako have a distinctive haunting song

Their song, with its long, organ-like notes, mews and sharp clicks, is unlike any other – immediately recognisable as one of the iconic sounds of New Zealand. When listening to kōkako in the forest, it can be difficult to pinpoint where the sound is coming from; at times it seems to come from everywhere, yet nowhere. The song is widely known, often featured as the 'bird of the day' on Radio NZ's morning programmes and important in other cultural contexts (see 5.10 below).

5.4 Kōkako sing in different dialects

Each kōkako population has its own 'dialect'. Some contiguous populations have several distinct dialects that may reflect social dynamics. In translocated populations, birds from different regions may be reluctant to pair up, and this could be related to the unfamiliarity of dialects. Kōkako song evolves continually. When birds are introduced from another region they may eventually change their song to match the local dialect, or elements of the new dialect may be adopted by the established residents.

5.5 Kōkako are territorial

Singing is used as a means of staking a claim to a territory. Kōkako are highly territorial, and defend their territory from neighbouring kōkako. Intrusions can elicit an aggressive response from the residents, and can sometimes result in fights. In high density populations in good habitat, territories can average eight hectares.

5. 6 Kōkako can be highly productive

Kōkako typically raise one brood of one or two chicks per year, but a brood can have up to three chicks and a pair can raise two or even three broods if conditions are good enough to allow a long breeding season. In ideal mainland conditions, with a high quality of pest control, kōkako populations have been known to increase by rates of up to 50% per annum.

5.7 Kōkako are faithful

Although it is not accurate to say that $k\bar{o}kako$ pair for life, as changes in partners have often been observed, they can stay together for many years and usually remain close to each other throughout the year. The interactions within a pair – courtship feeding, mutual preening, soft contact calls – can be endearing to human observers and help people to engage emotionally with the bird

Kōkako pairs can stay together for many years. This pair on Tiritiri Matangi Island had been together for five years by July 2015. Another pair on the Island stayed together for 17 years.



5.8 Kōkako can form single sex pairs

Kōkako are most vulnerable to predation by introduced mammals during nesting times. As females exclusively incubate eggs and sit with developing chicks, they are more vulnerable to predation than males, which in unmanaged populations can lead to a severe sex ratio imbalance. Some males develop mutual territories with other males, and effectively act like a normal male-female pair (they can even build nests). This can create false impressions of the security of a population. Although a forest might resound with kōkako song and appear to have a good number of pairs, a proportion of these might be male-male pairs, and therefore unproductive. Indeed, an exclusively male and gradually dwindling population might hang on for years after all the females have gone.

5.9 Kōkako are mysterious

Their natural habitat (forest) and their habits (feeding quietly through much of the day, often high in the canopy) make $k\bar{o}kako$ difficult to see – many people know the song but have never seen a $k\bar{o}kako$. When visiting a site that has $k\bar{o}kako$, seeing them can present an interesting challenge, making them a bird that many visitors particularly *want* to see.

5.10 Kōkako are iconic

Kōkako as taonga for Māori and all New Zealanders; they feature in Māori tradition as Maui's water carrier, the bird that helped him in his battle against the sun. Their image appears on the \$50 banknote, their song has been used as a sound back-drop in popular movies (for example, *The Piano*), in television advertising and in the bird chorus that welcomes international visitors at Auckland Airport. Their name and image are used by a café and brand of coffee. Along with kiwi, takahē and kākāpō, they are one of our most iconic birds.

5.11 Kōkako play a role in forest ecology

Kōkako forage from a wide variety of forest trees, with fruit forming a major part of their diet. This gives them a role as dispersers of seeds. Together with kererū and kākā they are the only birds large enough to digest and transport some of our larger native seeds such as tawa, miro, matai, hinau and pigeonwood. They also feed on the nectar of some plants (pōhutukawa, rata, rewarewa, kiekie, flax, pūriri), which makes them pollinators. Their presence thus helps to keep our forests diverse and healthy.

5.12 Kōkako as ambassadors for conservation

Kōkako are ideally placed to act as an ambassador species for native New Zealand forests, and indeed have done so in the past. Logging in Pureora Forest was stopped after conservationists became aware of the plight of kōkako and campaigned for their protection. Although they are rare, they are fairly widely scattered; many New Zealanders live within easy travelling distance of a population. Although they can still be hard to see at many of these sites they can often be heard, especially in the early morning, so there are increasing opportunities for people to have a wild kōkako experience (opportunities that remain a pipe dream in the case of much rarer species such as kākāpō). The fact that their numbers are recovering on the mainland due to pest control means that their survival can be linked unambiguously with the need to continue this effort (see 5.15 below) – the presence of kōkako is a reward for diligence. The effectiveness of this message is heightened in areas of forest close to kōkako populations into which kōkako could move without the need for translocation. In such places, the message, 'Sort out the pests and kōkako will arrive' might be a realistic one; their arrival and continued presence would be a sign of success.

5.13 Kōkako are rare

They were once common and widespread but their populations have been drastically reduced. The main causes of decline have been historic clearance of native forest and predation of adults, eggs and nestlings by introduced mammals (currently mainly ship rats and possums, but also stoats). They are recovering due to conservation efforts but most populations are small and they are widely scattered, mainly over the northern and central regions of the North Island. The small number of founders contributing to these isolated populations (particularly those started by translocations) may lead to reduced reproductive health (due to inbreeding) and reduced genetic diversity, which in turn can lower resistance to disease and the ability to adapt to other environmental changes. In addition to the impact of forest clearance and predation, kōkako face a reduction in the quality of their remaining habitat, caused by introduced browsing animals. Many key foods

for kōkako occur in the sub-canopy and are highly palatable to introduced herbivores such as feral goats, wallabies and deer. Some forests which could once have supported a breeding population of kōkako are no longer able to do so. The total population of North Island kōkako is estimated at between 2500 and 3000 individuals (2015).

5.14 Kōkako are threatened

Although the North Island kōkako is officially classified as 'At risk – Recovering',³ endlessly ongoing predator and browser control is required to sustain this. As well as the obvious and existing threats indicated above, kōkako and other native species could face new challenges posed by economic development and increasing pressure on biosecurity controls. Novel predators (including some invertebrate species such as ants) could slip through and decimate kōkako populations and other native species. Introduced birds, particularly those in the pet trade, could be a reservoir of new pathogens that could potentially harm kōkako, especially if they escaped into the wild.

5.15 Kōkako are difficult to protect

A huge management effort is needed to protect $k\bar{o}kako$. The following are some of the current and future mechanisms that can be used.

- Kōkako are most vulnerable when nesting. To enable sufficient breeding success for a population to grow, very intensive control of introduced predators is needed. In general, the occurrence of ship rats and possums must be below a 5% index of abundance, using standard monitoring techniques, at the beginning of every breeding season (October-November). This helps ensure the predator numbers don't get too high during the ensuing summer breeding period, although more pest control throughout the breeding season may be required. If the indices for these predators is above 10%, most kōkako nests are likely to fail. There are many effective methods for controlling ship rats and possums, but aerial 1080 is the most cost-effective.
- The quality and long-term sustainability of kokako habitat needs to be maintained and improved through the management and control of introduced herbivores such as feral goats, wallabies, deer and domestic livestock. Kokako advocates need to be aware of how forest habitats are changing due to browsing animals.
- Translocations between isolated kōkako populations may help to improve and/or sustain genetic health. At present, translocations normally involve adult birds, but egg-swaps potentially overcome difficulties of adults with different dialects struggling to find local mates. Translocations of adult birds to appropriate sites (large tracts of suitable forest habitat) can also be used to start new populations and restore kōkako to areas from which they have disappeared.
- Isolated patches of forest could be linked by planted corridors. This could enable kokako to colonise new areas or interbreed with other populations.

These and other conservation measures depend on a huge amount of human effort and require diligence, political will and financial backing. They also need to be adaptive and respond to new information (see 5.16 below).

5.16 Kōkako need research

The more we know about a species and the threats it faces, the better equipped we are to conserve it. Research is critical if we are to improve our understanding of kōkako ecology, including, for instance, the relationship between habitat quality and breeding success, and the actual levels of inbreeding and genetic change in today's isolated populations. Research might also help to make translocation methods more effective and efficient. A better understanding of the ecology of mammal predators and other introduced pests could improve our ability to control their numbers, as could research on mechanical and chemical methods of control. Funding, political backing, and supportive relationships between research institutions and conservation practitioners are all important in maximising the opportunities for and benefits from research.

These messages are intended to serve as a menu, from which groups engaged in kōkako advocacy can select the ones most relevant to their purposes and circumstances. It is very important that accurate scientific

information be used in conveying these messages. A list of easily accessible sources of information is provided at the end of this guide.

6.0 Opportunities and mechanisms for kokako advocacy

Opportunities:

- Every site which has kokako, whether naturally present, translocated or captive, provides an opportunity for advocacy, to tell the story of why they are there and what is needed to protect them.
- Every site with (realistic) hopes or plans to have kokako can explain why they want them, how they are preparing for them, and how they plan to protect them once they arrive.
- Every translocation is an opportunity to tell a kokako story and reinforce a general conservation message.
- Every incident involving an individual kōkako is a chance to engage public interest and emotion and build public support (for instance, a kōkako from the Waitakere Ranges crossed Auckland and turned up in a suburban garden).
- Every individual who is enchanted and fascinated by kokako is a potential advocate for them, and can express that fascination and enchant others too, through whatever media they choose.



Kōkako-inspired ceramics and textiles on show during Kōkako Celebration Week, Tiritiri Matangi Island, March 2012.

The potential mechanisms for $k\bar{o}kako$ advocacy are countless. The following list is probably far from exhaustive:

- Signage at sites holding kokako or which hope to have them in future.
- Guided walks at sites where kokako can be heard and seen.
- School visits to sites with kokako are an ideal mechanism for engaging children's interest.
- Magazines and newsletters (such as those issued by volunteer groups), and articles in more mainstream press.

- Photography competitions, exhibitions, calendars and other showcases for images are good mechanisms for displaying the beauty of kōkako.
- Cultural events, art, drama, concerts, particularly involving children, can help to engage people's interest.
- Public lectures, conference and workshop presentations.
- Displays at libraries, museums and information centres.
- Videos, both professional and amateur (which could be placed on *YouTube* or other websites).
- Websites run by organisations that engage in kokako conservation.
- Facebook pages, blogs and other social media.
- Books for different sectors of the market (for instance Maria Gill and Heather Arnold's children's book, *The Call of the Kōkako*⁴).



Kōkako paintings and kokako cookies on display at Mimi School, North Taranaki, where children have been inspired by a project to return kōkako to their area. Engaging children is particularly important in advocacy for conservation. (Photos courtesy of Mimi School)



7.0 Useful sources of information

DOC's website has pages on native bird species, with links to other resources. The kōkako page (<u>http://www.doc.govt.nz/nature/native-animals/birds/birds-a-z/kokako/</u>) has links to the 1999-2009 Kōkako Recovery Plan and short videos.

New Zealand Birds Online (<u>http://nzbirdsonline.org.nz/?q=node/526</u>) has an account of kōkako biology and ecology, with a list of scientific publications, and links to book extracts and sound recordings.

Te Ara, an on-line encyclopedia (<u>http://www.teara.govt.nz/en/large-forest-birds/page-7</u>), has a brief account of kōkako biology and ecology, images and a sound recording.

References

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3. Robertson, H. *et al, Conservation status of New Zealand birds 2012*, New Zealand Threat Classification Series 4, DOC, Wellington 2013.

4. Gill, M. 2011, The Call of the Kōkako, New Holland Publishers, Auckland.