

Koekoeā quest – uncovering secrets of the long-tailed cuckoo

Koekoeā / long-tailed cuckoo are declining, but being a migratory brood parasite (traits that set them apart from most of our other forest birds) may mask their vulnerabilities and challenge common conservation management actions. Decline of their hosts – especially pōpokotea in the North Island and mohua in the South Island – has been followed by decline and local extinction of koekoeā populations, but when new populations of these hosts have been established (e.g., through translocation to ecosanctuaries), koekoeā have not returned. Understanding why, and how to change this, is crucial for their conservation. The huge non-breeding range of koekoeā exposes them to a range of threats, such as habitat loss and extreme weather events. If birds from different parts of Aotearoa go to different areas of the Pacific, their loss from part of their range could have cascading effects thousands of km away.

We aim to better understand habitat selection and movement in Aotearoa, current population size, the degree of migratory connectivity between populations, and whether remaining koekoeā populations are genetically isolated. These are first steps toward understanding limiting factors for koekoeā and improving their management.

We will tag and track koekoeā throughout their range and use genomic tools to estimate population size and gene flow between remaining population. In addition to blood samples from live birds, we will collect samples from birds found freshly dead (for example from collision with windows) and we are asking for public help with this:

- For injured koekoeā, please phone 0800 DOC HOT (0800 362 468), or contact your nearest DOC office or native bird rescue. Then, please [let us know](#) too so we can liaise with them.
- For freshly-dead koekoeā, please put it in a plastic bag, freeze it, and contact Neil Fitzgerald fitzgeraldn@landcareresearch.co.nz as soon as possible.

