



Title: "Pensive"

Description: A South Island robin on Motuara Island

Photographer's name: Noelle Bennett

Where and when: Motuara Island, Queen Charlotte Sound. May 2019.

Sustainability: These rather sociable wee birds are a total delight to observe and photograph. Mostly associated with the South Island back country, they occur in forest and scrub, spending most of their time foraging on the ground. Their conservation status is listed as declining but not threatened.

Fossil records indicate the robins' presence throughout lowland New Zealand until drastic habitat reduction through deforestation. Undoubtedly, during the 19th and 20th centuries, forest clearance for farmland resulted put their population under immense pressure as their numbers plummeted to around 500 in total.

Today the main threat to their conservation is predation by feral cats, stoats, possums and rats. Moreporks (ruru) also destroy some nests, but it is the rats and stoats that are the main killers. Kerry Brown, then an MSc student, trained robins and tomtits (their close cousins) to come to him to collect mealworms. Kerry eventually just had to clap his hands and the male would show up to either scoff the mealworm, or carry it off to feed its partner that was sitting on their nest. By repeated bribes, Kerry could follow the male to the nest just as the eggs were laid. He discovered that many nests are depredated on the first night after the eggs are laid. One hapless pair tried 10 times to breed in the one breeding season, but each time their eggs were eaten by rats. The relentless pressure of the introduced predators is often underestimated, partly because the rats and stoats can find the clutch long before the researchers can.

Predators also kill the adults, especially adult females which carry out all the incubation and brooding of young and so are taken while sitting on the nest. This results in a skewed population sex ratio (way more males than females) and lower population growth rate. When left undisturbed, lifespans of at least 14 years have been recorded in the wild population if no predators are present.

Robin distribution seems to be patchy and haphazard. They are absent from some seemingly suitable areas and yet plentiful in others. This probably relates to variation in the force of predation by introduced mammalian predators, especially rats and stoats. A pair will tend to occupy a territory of between 1 and 5 hectares, although on pest-free islands such as Motuara, their densities are much greater at around one pair per 0.2 to 0.6 hectare. The population on Motuara Island is thought to be around 600 individuals, which is pretty impressive for an island that is only 59 hectares in size. Their preferred habitat is mature forest and scrub - either exotic or native - which has a mature and fairly open understorey that is preferably moist.

Photographer's notes: The robins on Motuara Island seem to have adapted to the presence of humans surprisingly well. Sit on one of the benches that are available to visitors and you don't have to wait long before at least one robin turns up to check you out. In fact, the encounters are usually so close that my normal telephoto lens for doing bird photography is too big...unless, of course, all I am wanting is a head shot! This same scenario had played out with the robin in this photograph. Eventually I decided to give up and move on. As I did so, the robin flew onto a rather picturesque branch that was close by and sat there, observing me, pensively. That was all too hard to resist and was just on the low end of what I could shoot with my big lens. That has to be a win/win.

Photo specs: This image is a composite produced from one single image which has been used multiple times with differing effects applied to each iteration to provide a more aesthetically pleasing end result. Technical specs: The image was taken using a Panasonic DC-G9 camera and a Panasonic Leica DG 100-400mm f/4-6.3 ASPH lens. Exposure details - 1/13 sec at f5.6 with an ISO of 800 and a focal length of 100mm (200mm full frame equivalent).

Digital specs: 5184 x 4375 pixels (22.68MP) @ 300dpi

Key words: birds, robin, *Petroica australis*, South Island robin, endemic, Motuara Island, predation, Noelle Bennett, Ecosystems Photography, sustainability.

Price: \$150 (incl. GST) for use of the digital image. Visit www.ecosystemsp photography/sales for details & to order, or to get a quote if you would like a high-quality print.

Donation: The price includes a \$100 donation to a sustainability organisation or project of your choice, or otherwise to *The Halo Project*, Dunedin. <https://www.haloproject.org.nz/>

We recommend that the donation goes to *The Halo Project*, Dunedin because they are working hard to create native forest habitat to receive the "spill-over" of birds flowing out of the Orokonui Ecosanctuary where predators are controlled. Their "Sources to Sea" (*Ki uta, ki Tai*) is a particularly valuable approach to restore whole landscapes with planting and predator control,

Image ref: NB#012 (please use this reference in all orders and correspondence).

Noelle Bennett
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