

KERERU NEWS No. 59 (31 August 2007)

Information about and observations of kereru / kuku / kukupa / kokopa / parea

1. Recent publication on kereru

Prendergast, T.S.; Ogilvie, C.C.; Wilson, K. 2006. The impact of predation on the threatened endemic kereru (*Hemiphaga novaeseelandiae*) by mammalian predators on Banks Peninsula, New Zealand. Proc. 22nd Vertebr. Pest Conf. (Eds Timm, R.M. & O'Brien, J.M.), pp. 282-286.

Here are some details from the abstract: The impact of mammalian predators on kereru populations was studied on three remnant native bush areas on Banks Peninsula from Feb 2004 to Mar 2005. Eighteen radio-tagged kereru were monitored for predator-induced mortality. Five adult kereru died, three as a result of predation. A cat was recorded on video preying on one adult. Rat and possum predation limited nesting success; however, this could have been offset by replacement nesting after nest failures. Cats preyed on chicks and adult kereru, which impacted the breeding viability of the adult population. Kereru may be able to withstand some nest predation pressure if the pair is able to re-nest in the same season. However, the ability of kereru to re-nest is reliant on them having an adequate food source so this may not be possible in poor seasons. These assertions require population modelling to determine their relative importance. Nesting success would benefit from rat and possum control during good breeding seasons. Adult survival would benefit from the control of predators such as cats and stoats. However, as kereru have integrated into urban habitat, managers must consult with the community before conducting predator control.

2. Kereru flying into windows – John Henderson

I retrieved 3 dead kereru from the Mathiesons' place at Invercargill recently. They had all hit the window and died that day! She had had 2-3 hitting the window the previous few days which had fortunately flown away; these ones weren't so lucky! Seems they had been perching in bare poplars across the lawn and swooping down. There was a good reflection of vegetation on the window.

3. Jesses for kereru – Ralph Powlesland

It was back in 1998 (KN no. 9) that I included some instructions for making and tying jesses on kereru. Given that it was some years ago, most people won't have access to that document, and I occasionally get asked for the instructions, I've now up-dated the document and included it on the DOC system – docdm-167569. The instructions include some images so that you can see how it should look once the jess is spliced – a picture is worth a 1000 words apparently! Non-docers wanting access to the instructions email me and I'll send them as an attachment.

4. A reference that may be of interest to you

Donald, P.F. 2007. Adult sex ratios in wild bird populations. Ibis.

The volume number and pagination are not evident yet, but the text is available via the internet: <http://www.blackwell-synergy.com/toc/ibi/0/0>

Bits of the abstract: This review assess population-level sex ratio patterns in wild bird populations, with an emphasis on the adult sex ratio (ASR). A quantitative assessment of over 200 published estimates of ASR, covering species from a wide range of taxa, regions and habitats indicates that ASRs are common in wild bird populations. On average, males outnumbered females by around 33%, and 65% of published estimates differed significantly from equality. In contrast, population-level estimates of offspring sex ratio in birds did not generally differ from equality. ASR distortion in birds was significantly more severe in populations of threatened species than in non-threatened

species. Higher female mortality, rather than skewed offspring sex ratio, is the main driver of male-skewed ASRs in birds, and the causes and implications of this are reviewed.

5. Kokopa turns up near Temuka, Canterbury – Mandy Home

I have been getting this newsletter since it started (1996), and read with envy all the news about Kereru (Kokopa our name for this bird) flying around everyone else's places and bush. But finally one has moved down to our part of the world (July); Arowhenua pah, 1 km south of Temuka. My Mum is about 70 years old and it is the first one she has ever seen around our pah, very large and healthy looking, sits in the kowhai stand next door at the school. Breast feathers are muddy looking not white (therefore possibly a juvenile) but healthy looking. A hundred years ago this area was all native bush but now the only stand of bush is Kakaahu about 13 km away and no connecting bush between, only small stands of willows along streams and creek beds. Yahoo things are looking up. And a Tui in Oamaru on the next-door willow tree singing its heart out on the 18th of June. That's a new one as well.

6. Garden bird survey, July 2007, by Eric Spurr of Landcare Research

As of late July 2007, 1800 result forms from the nation-wide garden bird survey this winter had been sent in. Preliminary analyses indicated that blackbirds occurred in about 90% of gardens, house sparrows in 83%, silvereyes in 81%, starlings in 54% and kereru in about 11%. House sparrows and silvereyes were recorded in the greatest number at any one time (average 7.7 per garden) during one hour of observation. The next most abundant species were blackbirds and starlings (2.4 per garden). As you might expect, kereru were well down the list at about 0.2 per garden. It will be interesting to see whether kereru abundance in urban gardens increases over the next 20 years or so, particularly in regions where Councils and landcare groups are carrying out conservation activities towards such a goal. If you would like more up-to-date results from this survey check out the following

website: <http://www.landcareresearch.co.nz/research/biocons/gardenbird/>

7. New bird distribution atlas for New Zealand birds

Robertson, C.J.R.; Hyvonen, P.; Fraser, M.J.; Pickard, C.R. 2007. Atlas of bird distribution in New Zealand 1999-2004. The Ornithological Society of New Zealand, Inc. Wellington, N.Z.

This book, all 533 pages of it, has appeared in the mail boxes of OSNZ members around the country this month. Of the 3212 10,000 m grid squares distributed across the country, 96% were visited during the survey period and at least one bird list was provided for each. The 2007 atlas is the second produced by the society, and up-dates the first atlas published in 1985 (Bull *et al.*), which was the result of surveying carried out during 1969-79. The change in the distribution of various bird species during the intervening 20 years makes for an interesting comparison, with the results of the 1985 atlas repeated for each species on the relevant pages of the latest version. A cursory comparison of the distribution of kereru for the two surveys suggests that the distribution of the species has improved slightly, mainly as a result of apparently more frequent occurrence grid squares involving lowland farming areas, such as Taranaki, Wairarapa, East Cape and of the south-eastern South Island. This comparison of kereru distribution from the two atlases deserves a more critical analysis.

If you are keen to get a copy of the atlas, please write to: The Ornithological Society of New Zealand, P.O. Box 12397, Wellington; email OSNZ (OSNZ@xtra.co.nz) or contact Christopher Robertson (cjrr@wildpress.org). Price is \$98 incl gst and P&P.

8. Kereru – continuation of where are the gaps in our knowledge, and if the information is available where is it? – Ralph Powlesland

Body maintenance

Preening

- No description of preening movements

Rain-bathing

- Gibb, J.A. and Flux, J.E.C. 1994. Rain-bathing by pigeons. *Notornis* 41:146-147.
- Time-lapse video equipment used at kereru nests have recorded late-stage nestlings rain-bathing during day and night (RGP pers. obs.).

Sun-bathing

- Gibb, J.A. and Flux, J.E.C. 1994. Rain-bathing by pigeons. *Notornis* 41:146-147.

Stretching

- No description of stretching movements

Social organization

Solitary, pairs, family groups, flocks

- Higgins, P.J. and Davies, S.J.J.F. 1996. New Zealand pigeon. Pp. 1016-1025 *in* Handbook of Australian, New Zealand and Antarctic Birds. Vol. 3, Snipe to Pigeons. Oxford University Press, Melbourne. Brief description given of social organization in this reference, and lists source references.

Pair bonds

- Higgins, P.J. and Davies, S.J.J.F. 1996. New Zealand pigeon. Pp. 1016-1025 *in* Handbook of Australian, New Zealand and Antarctic Birds. Vol. 3, Snipe to Pigeons. Oxford University Press, Melbourne. "Probably lasts more than one season, and pairs known to associate in non-breeding season." Duration of pair bonds not known; too few instances of both members of a pair being individually marked and monitored for more than a year or two.

Social behaviour

Agnostic behaviour

- Higgins, P.J. and Davies, S.J.J.F. 1996. New Zealand pigeon. Pp. 1016-1025 *in* Handbook of Australian, New Zealand and Antarctic Birds. Vol. 3, Snipe to Pigeons. Oxford University Press, Melbourne. Noted that two males will fight over a potential mate, and that one bird will drive off others from a feeding site, but no detailed description at activities involved.

Nest defence by adult and chick

- Higgins, P.J. and Davies, S.J.J.F. 1996. New Zealand pigeon. Pp. 1016-1025 *in* Handbook of Australian, New Zealand and Antarctic Birds. Vol. 3, Snipe to Pigeons. Oxford University Press, Melbourne. The activities of adults described (growl, peck, strike with wing) have been towards people closely approaching the nest. Chicks react

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similarly but without growling. Similar activities, and including puffed up plumage, have been evident of an incubating kereru from video monitoring footage when approached by a rat at night (RGP pers. obs.).

Anti-predator activities when feeding or roosting

- Higgins, P.J. and Davies, S.J.J.F. 1996. New Zealand pigeon. Pp. 1016-1025 *in* Handbook of Australian, New Zealand and Antarctic Birds. Vol. 3, Snipe to Pigeons. Oxford University Press, Melbourne.
- Become alert with sleeked plumage, head raised, occasionally give alarm coo (single loud *ku*) which may be repeated several times, and watch predator intently. Those on the ground feeding quickly fly up into the canopy nearby. If the predator is a flying harrier, perched kereru will invariably take flight at close approach of the harrier and circle about.

Responses to people

- Note responses of kereru on nests to people given above. While there is little published information on the reaction of kereru to people, it is common knowledge that individuals will often allow people to approach closely (to within 5-10 m) when they are perched, feeding in low vegetation, and even when feeding on the ground. However, this does vary considerably between districts / locations, probably in response to hunting by people. For example, kereru in Whirinaki Forest near Minginui, where some illegal hunting occurred during 1998-2002, flew off at the sight of a person, whereas those on Kapiti and Little Barrier Islands (strict security of all wildlife present) usually allowed close approach (RGP pers. obs.).