

KERERU NEWS No. 58 (14 June 2007)

Information about and observations of kereru / kukupa / parea.

1. Kereru flock at Halfmoon Bay, Stewart Island - Brent Beaven

Was heading home on 7 March 2007 when I saw a large flock of kereru pass over. I counted 70 and probably missed a couple. Largest flock I have yet seen on Stewart Island.

2. Kereru drinking in situations where they are exposed to grave risk - Robin Fordham

Ian Flux (Kereru News 57), myself and others in earlier issues, have described occasions when kereru have been seen at very close quarters drinking water in situations where they seem unaware of events going on around them, and accordingly the risk of sudden death by predation or lethal accident (such as by a car) is extreme. These observations, if not frequently reported, appear to be widespread, and scattered through the year. Kereru are certainly a species at risk and are not well placed to withstand mortality by mammal or human predation, or accidents caused by people. I suggest, therefore, that it would be very useful for kereru drinking behaviour to be examined.

There are two immediate questions:

- (1) Is all drinking by kereru carried out in such a way that the birds are seriously at risk of predation or accident?
- (2) Is the drinking behaviour of kereru when the birds appear to be 'unaware' of external events occurring near them explicitly related to particular plant foods?

I'm sure there are other possible questions, but these two are readily quantifiable, and could make an MSc study for a university student. To kick off - I have seen a kereru repeatedly drinking from a road-side puddle directly after gorging on puriri fruit. If drinking water in an 'unguarded manner' is the norm for kereru then, sadly, there are serious implications for kereru survival throughout the country, since mammal predators and malign human influences are widespread. Alternatively, if only some plant foods induce 'risky' drinking, some regions of N.Z. may be relatively safer than others for kereru.

3. Captive kereru regurgitating - Karin Wiley

In response to your request for any sightings of kereru regurgitating food, I often see this happening with injured/sick kereru that have been admitted to our native bird rehabilitation centre for treatment. It usually happens if a kereru has been given food before it is fully rehydrated, or with particularly nervous kereru. In all these cases it is with birds that are being hand fed. I have never seen it happen with kereru that are self feeding. It usually stops after a day or two, but if it does not and there appears to be nothing wrong with the bird, I usually resort to crop feeding with pureed food for a few days or increase the fluid intake.

4. Survey for kereru over Banks Peninsula - Heidi Stevens, Kaupapa Kereru Project Coordinator

Kaupapa Kererū recently carried out a survey for kereru over Banks Peninsula/Te Pātaka o Rākaihautū. The count was a huge success with 39% of the peninsula (that's a whopping 362 km²!) surveyed. A fantastic 128 people took part in the survey. A total of 648 kererū were recorded. Kererū were recorded in 42% of the surveyed grids, each grid square being 1 km square. Seventeen percent of kererū counted were found in farmland/grassland habitat, 8% in urban areas, 63% in native forest habitat and 12% in exotic forest habitat. Of course some of these habitats are more common on the peninsula than others. Accordingly, we did further

statistics and found that kererū occurred in 47% of the surveyed grids that contained urban habitat. Kererū occurred in 11% of the grids containing farmland/grassland, 41% of the grids containing native forest and 14% of the grids containing exotic forest. Should you wish to see a map showing the distribution of the grids surveyed and kererū recorded on the day, go to www.kaupapakereru.co.nz

5. Kereru rain-bathing in garden sprinkler spray at Pigeon Bay – Prue Kennard

The kereru are pretty tame around here in Pigeon Bay, Banks Peninsula! Our property is surrounded on two sides by native bush and one fenceline is filled with tree lucerne. The birds come in pairs to our bird bath in the garden to drink. One day after about a month without rain I had turned on the sprinkler to water the veggies, and a kereru came and sat on a railing in the spray to bathe (*excellent images provided, let me know if you would like to see one – RGP*). It lifted first one wing then the other, turned to front and back, and had a thorough clean-up - quite amazing! Later that day I decided to water part of the flower garden where a kereru was picking at the geraniums, and it flew away. But it was obviously annoyed as it came swooping back and actually landed on my head momentarily! Not satisfied with that, he did another circle and came again - not right on to my head this time but close enough for me to feel its 'wing wind'.

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

Weight - mean, minimum, maximum; nestlings, juveniles, males, females, regional and seasonal variation

- Gill, B.J. 2006. Post-mortem examination of New Zealand pigeons (*Hemiphaga novaeseelandiae*) from the Auckland area. *New Zealand Journal of Zoology* 33: 31-37.
- 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.
- Robertson, H.A.; Whitaker, A.H.; Fitzgerald, B.M. 1983. Morphometrics of forest birds in the Orongorongo Valley, Wellington, New Zealand. *New Zealand Journal of Zoology* 10: 87-98.
- Clout, M.N. 1990. The kereru and its forests. *Birds International* 2: 10-19.
- Thorsen, M.; Innes, J.; Nugent, G.; Prime, K. 2004. Parental care and growth rates of New Zealand pigeon (*Hemiphaga novaeseelandiae*) nestlings. *Notornis* 51: 136-140.
- There has been no study of the seasonal weight changes of adult kereru other than that of Gill (2006) for the Auckland region. Ralph Powlesland has some unpublished data from birds captured in Whirinaki Forest Park, central North Island, New Plymouth and Invercargill.

Anatomical studies

Gut length and morphology (variation with food type – fruit vs foliage), brain size, vision, etc

- I'm not aware of any studies of the internal anatomy of kereru. Given the 100+ dead kereru passed into museums and DOC offices through the country each year, there is a great opportunity for someone to carry out such a study, and perhaps make comparisons with other pigeon species.

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Plumage

Description

- 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.

Moult

- 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.
- Gill, B.J. 2006. Post-mortem examination of New Zealand pigeons (*Hemiphaga novaeseelandiae*) from the Auckland area. New Zealand Journal of Zoology 33: 31-37.

Flight

- I'm not aware of any detailed descriptions of the flight of kereru,
- other than descriptions of the display flight (see: James, R.E. 1995. Breeding ecology of the New Zealand pigeon at Wenderholm Regional Park. Unpubl. MSc thesis, University of Auckland, Auckland; copied in Mander, C.; Hay, R.; Powlesland, R. 1998. Monitoring and management of kereru (*Hemiphaga novaeseelandiae*). Department of Conservation Technical Series No. 15. DOC, Wellington),
- and the characteristic sound made by flying kereru (see comments on p 1021 under Voice (non-vocal sounds) in 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).

Voice

- 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. This reference gives descriptions of an **adult advertising call**, and what I think also describes the **contact call** between pair members but also given repeatedly and drawn out by males trying to attract mates to possible nest sites (RGP pers. obs.), **alarm call** of foraging or roosting kereru, **growl** when an adult on the nest is approached, and the **piping or squeak calls** of nestlings.
- Play-back of alarm calls and the wing-flapping sounds made when kereru were striking each other during fights in defence of food trees has been used to attract kereru into mist-nets for capture (Powlesland, R.G.; Wills, D.E.; August, A.C.L.; and August, C.K. 2003. Effects of a 1080 operation on kaka and kereru survival and nesting success, Whirinaki Forest Park. New Zealand Journal of Ecology 27: 125-137).