

**KERERU NEWS No. 40 (xx November 2003)**

Hi All,

Some information about matters relating to kereru.

**1. Recent publications on pigeons that may be of interest**

- a) Barre, N.; De Garine Wichtitsky, M.; Lecoq, R.; Maillard, J-C. 2003. Contribution to the knowledge of the New Caledonian imperial pigeon *Ducula goliath* (Gray 1859) with emphasis on sexual dimorphism. *Notornis* 50: 155-160.

Males were significantly larger with regard to weight, body length, wing length, tail length, tarsus length, and head length and width, but there was no difference in colour of skin, bill, iris, feet or feathers.

- b) Meehan, H.J.; Hillyard, K.; Guy, M. 2003. Retention time of beads in captive Torres imperila pigeons, *Ducula spilorrhoa* spilorrhoa. *Notornis* 50: 167-168.

This study used beads to simulate seeds, and test their retention time in captive birds. Four beads were regurgitated, and 11 were defaecated between 45 and 260 mins after ingestion (mean = 85 mins).

- c) Harper, G.A. 2003. New Zealand pigeon (kereru: *Hemiphaga novaeseelandiae*) crossing Foveaux Strait. *Notornis* 50: 174-175.

Probable flight distance over the strait being c. 32 km.

- d) Franklin, D.C.; Wilson, K-J. 2003. Are low reproductive rates characteristic of New Zealand's native terrestrial birds? Evidence from the allometry of nesting parameters in altricial species. *NZ J. Ecology* 30: 185-204.

Includes results for kereru and parea, which are considered as examples of 'gigantism'.

- e) Mander, C.; Hay, R.; Powlesland, R. 1998. Monitoring and management of kereru (*Hemiphaga novaeseelandiae*). Department of Conservation Technical Series No. 15.

Although some portions are out-of-date, this report is now available via the DOC web site: <http://www.doc.govt.nz/Publications/004~Science-and-Research/DOC-Technical-Series/>

**2. 2003 Parapara kereru survey - Astrid van Meeuwen-Dijkgraaf**

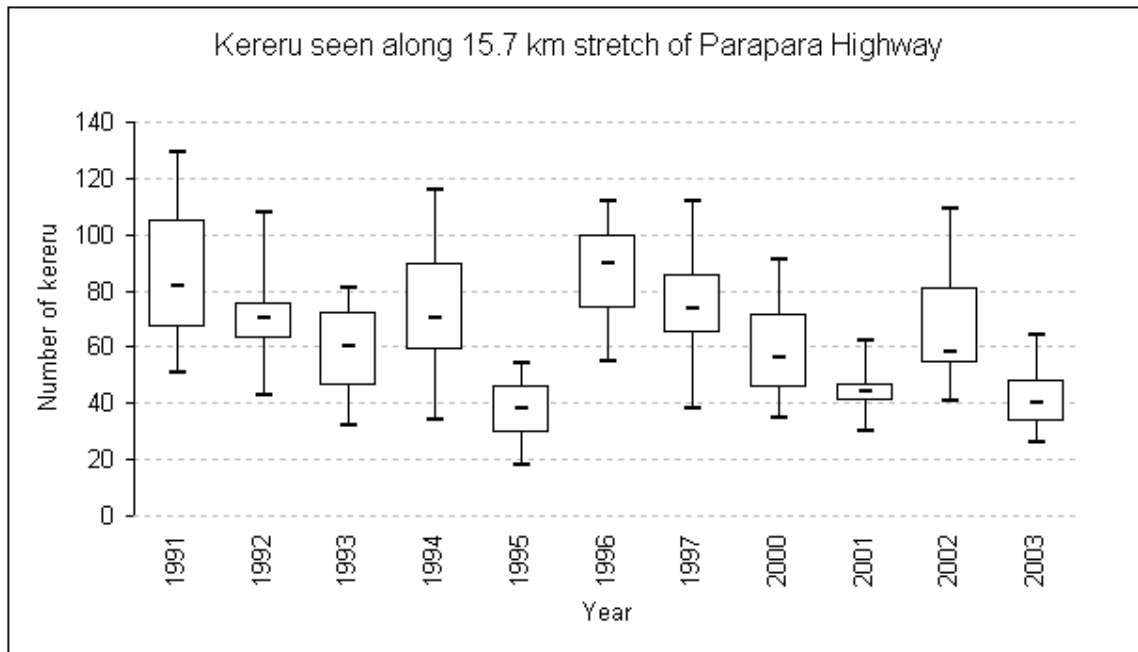
We completed the annual kereru count along a 15.7 km section of State Highway 4 known as the Paraparas. This involves driving at 10-30 km/hr along the road in a well signposted truck and counting any kereru seen along the way with unaided eyes. The survey is conducted daily from 1 to 14 September, starts at 4 pm, and the entire transect takes  $\frac{3}{4}$  to 1 hour to complete. This year we also marked the location of the birds on high-detail aerial photos supplied by AgResearch for that purpose.

AgResearch is interested in determining which species of tree the kereru feed on so that they can tell farmers (and land managers) which species to plant to attract kereru to their properties. Marking the location of the birds in this way also enabled us to estimate how far the birds were from the observers.

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This year was one of the three years with lowest numbers of kereru seen over the 13-year duration of the survey. Only during the 1995 survey were fewer kereru observed. The low number of kereru this year can be seen in the boxplot (Figure 1; central dash=median, box = central 50% of sightings, lines extending either side are smallest and largest number of kereru seen). The reasons for these low numbers are uncertain. It was notable this year that, despite the apparently warm winter and spring, the trees that kereru are usually seen feeding on at this time of the year (often certain poplar and willow spp.) had a very late bud-break, and only just started producing leaves in the last 2 days of the survey. Perhaps the continued soil water deficit has a role in late bud-break. It could also be that there is sufficient food available elsewhere so that kereru do not need to feed on foliage near the transect. There also was a report of somebody possibly poaching kereru north of Wanganui.

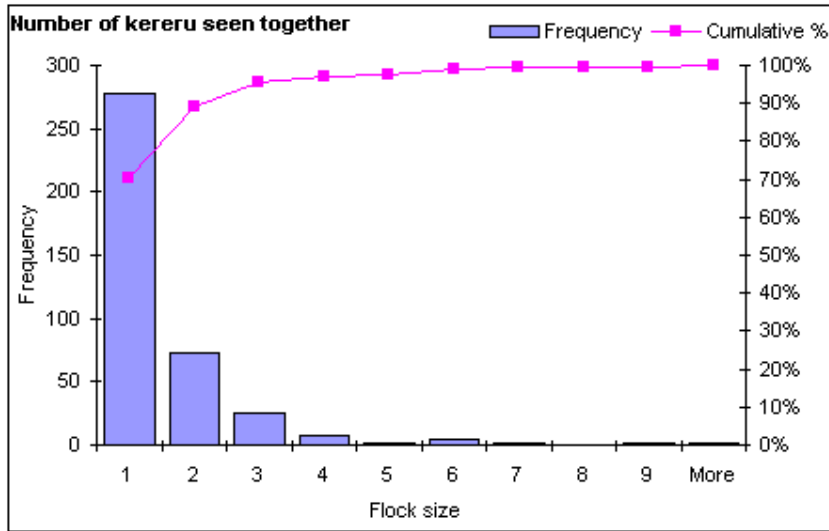
Figure 1: Box plot of number of kereru seen along a 15.7 km stretch of the Parapara Highway.



The key species in this area, silver poplar and crack willow, had only just started producing leaves at the end of the 14-day survey. AgResearch will be analysing the location diagrams of kereru to determine what species of tree they were seen in.

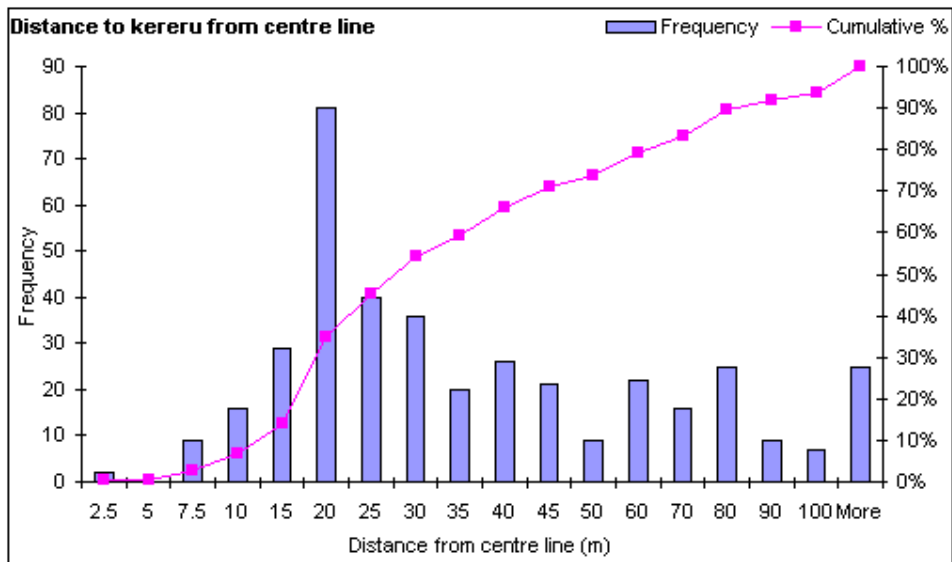
Indicating the location of birds on aerial photos also allows us to report on 'flock size', the number of birds seen in each tree. Mostly there were single birds in the trees (70%), or pairs of birds (19%). However there was one occasion where a flock of 20 birds flew out of tree lucerne (indicating how many we probably fail to see), and two occasions where flocks of 6 or 7 birds were seen in the same tree (an as yet unidentified species of planted willow). Figure 2 shows the frequency with which the various flock sizes were noted.

Figure 2: Frequency of flock sizes noted



Plotting birds on photos also gave the opportunity to estimate the distance to birds seen. It must be remembered however that this is a survey of road-side trees and not a random transect through a forest. Twenty percent of the observations were 15-20 m from the centre line (i.e. in trees lining the road) and 66% of the observations were less than 40 m away. There was only one observation at zero and the furthest observation was 255 m away. Figure 3 groups the distances in to classes of 5 m intervals.

Figure 3: Number of occasions that kereru were spotted at particular distances.



There was a small negative correlation between rain and how far kereru were seen (ie heavier rain shorter distance; Pearsons = -0.109 Sig = 0.031, N = 393). Wind and level of cloudiness had no significant effect on distance sighted. There did not appear to be any significant difference between how far away different observers spotted kereru.

**3. Freedom and its mates at Stoney Oaks, near Inglewood - Ralph Powlesland**

About a year ago I included a brief article in Kereru News about Freedom, a kereru that had been hand-reared by Gail Simons from a late nestling, was released, and subsequently returned daily for a feed of green peas. A month later Fancy started arriving with Freedom for a free feed as well. In August, I visited Gail & Trevor Simons at Stoney Oaks, a private wildlife park, to see the kereru. Instead of 2 confiding kereru, there were four, with a fifth tagging along, but not willing to feed from the hand at that stage. Of course it is not unusual to get close to kereru, but to have one fly down on to your arm and eat out of your hand is incredible. If you are in the vicinity and would like to enjoy the same experience here is what you need to do. Give Gail a ring beforehand (06-7567624) to see if the park is open and what the likelihood of a kereru turning up for a meal is. There is an admittance fee of \$6 for adults and \$4 for kids. As well as the kereru, there are a huge range of mammals (deer, rabbits, pigs, goats, sheep, chinchillas, etc) and birds.