

KERERU NEWS No. 44 (27 September 2004)

A few more snippets relating to kereru.

1. Kereru observations

Mid May, 2-3 Kereru in central Christchurch next to the hospital feeding in a holly tree. - **Rod Hay**

Had a kereru brought in a couple of days ago that had crashed into a window. That is nothing unusual, BUT apparently it had gone right through the window and into the house ... must have been an old house aye???

The bird is in fairly good condition considering. It has a bent beak which is responding to being taped up and the internal bleeding is under control. It weighs 550 g which would have to be fairly good for this time of year. - **Nik Egerton**

There was a similar incident reported from Karori, Wellington, with a bird crashing through a window, and soon after being released little the worse for the impact!! - **Peter Reese**

I spent the summer at Paengaroa, and besides the usual weeding did bird observations. I did the usual kereru into and out of reserve observations, and was also interested in their feeding. They did utilise the willow occasionally, as well as plenty of kowhai, most of the summer, taking older leaves as well as the young ones. There was just one day (10/1/04) when I saw one kereru actively seeking out the galls on the willow leaves. I had always wondered if any did do this so was interested to see it happen. I watched this bird for about 20 minutes and for about 7 minutes the bird sought out galls. In spite of looking very carefully for more occurrences over the season I never did see it happen again. I would be curious to know if anyone else has seen this. I know some psittacines will eat willow leaf galls. - **Deb Anthony**

2. Reference about kukupa research and conservation

J. Innes, G. Nugent, K. Prime & E.B. Spurr. 2004. Responses of kukupa (*Hemiphaga novaeseelandiae*) and other birds to mammal pest control at Motatau, Northland. NZ Journal of Ecology 28: 73-81.

Here is part of the abstract:

"Ship rats and possums were targeted by trapping and poisoning throughout Motatau Forest (350 ha) from 1997 to 1999; only possums were targeted in 2000. All 13 kukupa nests located before pest control started failed at the egg stage, but all 7 nests located in 1998-99 successfully fledged young when trapping and tracking indices of possums and ship rats were less than 4%. After pest control, counts of kukupa and some other bird species increased at Motatau compared with counts in a nearby non-treatment block, suggesting numbers of adult kukupa can be increased in small forest areas by intensive pest control. This increase is due at least partly to increased nest success. Evidence from time-lapse video cameras, sign remaining at nests, and nest success rates under different pest control regimes suggest both ship rats and possums are important predators at kukupa nests."

3. Some findings from observations of tagged kereru in Invercargill - Nigel Sadlier

The observations were carried out over a period of three weeks during June/July 2004 at Queens Park and Anderson Park. Five kereru were observed, of which one yielded no feeding observations. The remaining four are presented as follows.

Table 1 - Percentage of time individuals spent feeding

Identity	Diurnal observation (min)	% time feeding
#10 (Folivore)	506	14.62%
#30 (Folivore)	517	15.08%
#34 (Frugivore)	414	19.56%
#64 (Folivore)	501	23.75%
Total	1938	18.25% (Average)

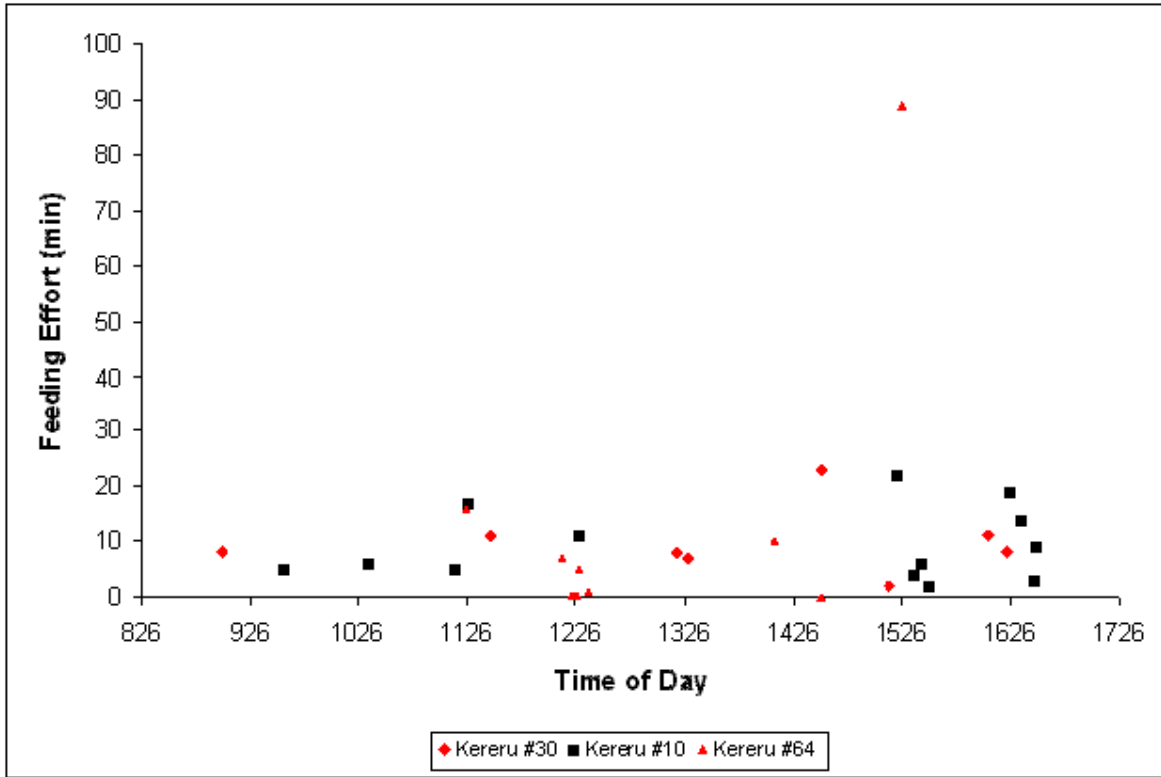


Figure 1 - Feeding effort by time of day

The figure shows the feeding effort of the folivorous kereru (#'s 10, 30 & 64) in minutes relative to the time of day. The data for kereru #34 have not been included as the diet consisted wholly of fruit. The graph should be used as an indication only of winter foliage feeding effort relative to time of day as statistically there is no significant difference between the morning and afternoon feeding efforts ($P = 0.17$). The coefficient of determination ($R^2 = 0.0425$) shows very little variation from the independent variable (time of day), even with the influence of the outlier as shown. The time of day is not proven as influential towards winter foliage feeding effort. $N = 30$

Feeding frequency then became an important consideration as follows:

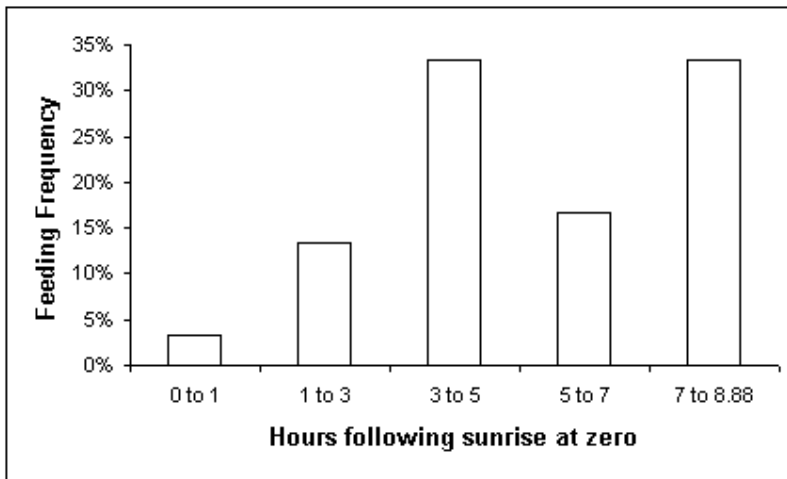


Figure 2 - Feeding frequency (number of feeding stints per observation)

The feeding frequency of folivorous kereru shows peaks in feeding activity towards the middle and end of the day. Feeding activity observations began half an hour before sunrise and continued until half an hour after sunset, with data here represented as diurnal groupings (in hours) following sunrise at zero. The data for kereru #34 have not been included as the diet consisted wholly of fruit. N = 30.

The following two figures highlight the mean feeding effort in relation to food species. Sop mic (*Sophora microphylla*), Cop rot (*Coprosma rotundifolia*), Par het (*Parsonsia heterophylla*), Pla reg (*Plagianthus regius*), Pru nig (*Prunus nigra* – exotic), Ile aqu (*Ilex aquifolium* - exotic), Pru fer (*Prumnopitys ferruginea*).

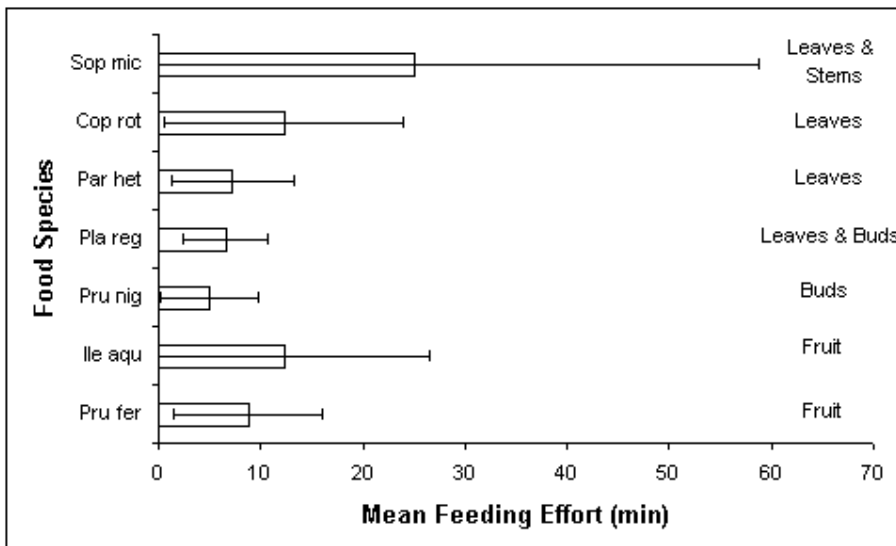


Figure 3 - Feeding effort per food species

This figure identifies the mean feeding effort in relation to food species recorded (\pm 95% confidence intervals), N = 39 samples. The high error associated with samples represents the low sample numbers for each species, but still represents a clear tendency in favour of *Sophora microphylla*.

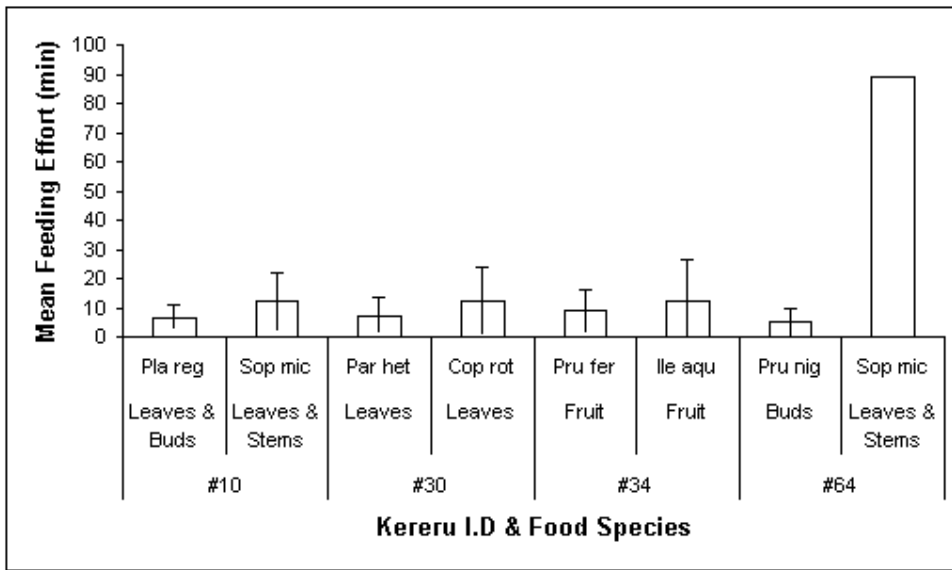


Figure 4 - Mean feeding effort per food species for individual kereru

This figure identifies the mean feeding effort on various food species by each kereru observed. (\pm 95% confidence intervals) (#10, N = 14) (#30, N = 8) (#34, N = 8) (#64, N = 9). No error bars are associated with the *Sophora microphylla* sample for kereru #64 as only a single 89 minute feeding observation were recorded.