

KERERU NEWS No. 63 (12 May 2008) from Ralph Powlesland

Information about and observations of kereru / kuku / kukupa / kokopa / New Zealand pigeon / parea / Chatham Islands pigeon

1. Kereru in the Maungatautari Ecological Island Trust's mainland island – Chris Smuts-Kennedy

The Xcluder fence encircling the Maungatautari mainland island, Waikato, was completed in winter 2006, and three aerial poison baiting operations were then undertaken, the final one being in September 2007. We have now had two breeding seasons with pest species at least significantly controlled if not eradicated, and that seems to have resulted in observations by MEIT staff of several birds species in greater numbers than previously, including kereru. For example, in mid February a flock of 20 kereru was seen near the southern enclosure, and another flock of 15 near Albert's property. These observations have yet to be backed up with monitoring results, but we are carrying out 5-minute bird counts biennially (two completed and the next to be carried out in November).

2. Kereru courtship displays – Ralph Powlesland

As a result of my comment in Kereru News No. 61 about the lack of kereru courtship display recorded on video, Jean King sent me some footage on DVD of a kereru displaying to another. I assume the displaying bird is a male and the other his mate. The sequence starts with two twirls, one in each direction, by the 'male' on a branch within 0.5 m of the other (I don't think the tail of the twirling bird brushed the other), then the displaying bird adopts a semi-erect posture and carries out what looks like two 'swipes' of noisy preening of primaries (head under wing) (I've seen and heard this of kereru), then still in the semi-erect posture but with head now bowed on to its chest and fluffed-up feathering, particularly of white chest and upper dorsal neck feathers, the bird does a sequence of six vigorous bounce movements that result in the branch and the other bird moving as well, followed lastly by two more twirls, one in each direction. The other bird did not respond positively or negatively, although the description in HANZAB suggests the displays can be a prelude to copulation.

3. Large flock of kereru at Waikanae – Edward Dixon

On the 2nd February 2008 at about 2 pm I was walking in the Waikanae riverbed below the SH 1 bridge when a flock of kereru flew over me. There was many and I was not able to count them but I estimated that there were about 40. I have lived in Waikanae for over the 55 years and this is the largest flock of kereru I've seen.

4. Release of a captive kereru near Warkworth – Warren Agnew

Each year we care for kereru which have flown into windows in our Scotts Landing, Warkworth, neighbourhood. We have just built a good sized aviary with two separate compartments and the other day we transferred a pigeon into each of the sections. Two days later I noticed one bird, which had recovered after six weeks of care and was to be released the next day, moving constantly and excitedly in its compartment. It had flown to a branch placed near the roof and was walking backwards and forwards along it at a high speed. What was causing the caged bird to act so excitedly was the fact that it could see a wild kereru nearby but I couldn't see it until it flew down onto the aviary.

The wild kereru paid no attention to the other kereru in the cage next door. We watched the birds with great interest and decided the one we were caring for should be released immediately. When Lois went to the aviary the wild kereru flew only 10 metres away and sat watching intently. Lois caught the aviary bird, took it outside and placed it on the ground. It flew onto a pergola some 20 metres away where the wild bird quickly joined it. The injured bird had been picked up about a

kilometre away from our place, and we think that the injured bird and the wild pigeon that arrived at the aviary were probably mates.

5. Flight speed of a kereru – Nikki La Monica

I clocked a kereru flying at 78-80 km/hr for at least a kilometre next to me along SH1, Kapiti coast.

6. Increase in kereru distribution – Ralph Powlesland

A comparison of the results from the OSNZ surveys of 1969-79 and 1999-04 suggests an increase in kereru distribution through New Zealand. The survey in 1969-79 used 10,000 yd grid squares, and 10,000 m grid squares were used in 1999-04. 96% of total squares through North, South and Stewart Islands were surveyed during each period.

This table shows the proportion of surveyed squares that kereru were detected in.

Survey	Island	Squares surveyed / squares with kereru	% squares with kereru
1969/79	North Island	1582 / 813	51.40%
1999/04	North Island	1400 / 1013	72.40%
1969/79	South & Stewart Island	1958 / 836	42.70%
1999/04	South & Stewart Island	1641 / 773	47.10%
1969/79	Total	3540 / 1649	46.60%
1999/04	Total	3041 / 1786	58.70%

The increased distribution in the North Island appears to have been mainly in rural Waikato, Taranaki and Wairarapa, plus in the forested and rural region of East Cape. In the South Island there seems to have been a decline in distribution in the forests of the Buller region, and an increase through rural Canterbury and Southland.

7. Kereru – continuation of where various topics of information about kereru are available, and where the gaps in our knowledge about kereru are (full listing available to DOC staff at docdm-117328) – Ralph Powlesland

Breeding effort – regional timing of breeding, variability from year to year, nesting attempts per season, re-nesting after failed attempt, over-lapping nesting attempts

- Bell, B.D. 1980. Relaying of New Zealand pigeon. *Notornis* 27: 97-98.
- Clout, M.N. 1990. The kereru and its forests. *Birds International* 2: 10-19.
- Clout, M.N., Gaze, P.D., and Hay, J.R. 1988. Clutch overlap by a New Zealand pigeon. *Notornis* 35: 59-62.
- Clout, M.N., Karl, B.J., Pierce, R.J. and Robertson, H.A. 1995. Breeding and survival of New Zealand Pigeons (*Hemiphaga novaeseelandiae*). *Ibis* 137: 264-271.
- Department of Conservation. 2002. *Kukupa, native wood pigeon, survival guide*. Northland Conservancy, Department of Conservation.
- Dunn, P.; Morris, R.B. 1985. New Zealand pigeon. Pp 238-239 In: Robertson, C.J.R. (Ed.), *Reader's Digest complete book of New Zealand birds*. Reader's Digest Services Pty Ltd, Sydney.
- Flux, I.A., Powlesland, R.G., Dilks, P.J., Grant, A.D. 2001. Breeding, survival and recruitment of Chatham Island pigeon (*Hemiphaga chathamensis*). *Notornis* 48: 197-206.

KERERU NEWS No 63

- 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.
- Genet, R., Guest, R. 1976. Winter nesting of New Zealand pigeon. *Notornis* 23: 319.
- 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. (Long précis of kereru ecology and more)
- James, R.E. 1995. Breeding ecology of the New Zealand pigeon at Wenderholm Regional Park. Unpubl. MSc thesis. University of Auckland, Auckland.
- Oliver, W.R.B. 1955. New Zealand pigeon (kereru) and Chatham Island pigeon (kuku). Pages 440-444 in *New Zealand birds*, 2nd edition. A.H. & A.W. Reed, Wellington.
- Langham, N.D. 1991. The ecology of the kereru or New Zealand pigeon (*Hemiphaga novaeseelandiae*). DSIR Land Resources Contract Report No. 91/45. DSIR Land Resources, Havelock North.
- Lee, W.G., Clout, M.N., Robertson, H.A. and Bastow Wilson, J. 1991. Avian dispersers and fleshy fruits in New Zealand. *Proc. Int. Orn. Congr.* XX: 1624-1629.
- Medway, D.G. 2006. *The birds of Pukeiti*. Zenith Publishing, New Plymouth.
- Pierce, R.J. and Graham, P.J. 1995. Ecology and breeding biology of kukupa (*Hemiphaga novaeseelandiae*) in Northland. *Science & Research Series No. 91*. Department of Conservation, Wellington.
- Powlesland, R.G., Dilks, P.J., Flux, I.A., Grant, A.D. and Tisdall, C.J. 1997. Impact of food abundance, diet and food quality on the breeding of the fruit pigeon, *Parea Hemiphaga novaeseelandiae chathamensis*, on Chatham Island, New Zealand. *Ibis* 139: 353-365.
- Powlesland, R.G.; Wills, D.E.; August, A.C.L.; August, C.K. 2003. Effects of a 1080 operation on kaka and kereru survival and nesting success, Whirinaki Forest Park. *NZ J of Ecology* 27: 125-137.
- Schotborgh, H.M. 2005. An analysis of home ranges, movements, foods and breeding of kereru (*Hemiphaga novaeseelandiae*) in a rural-urban landscape on Banks Peninsula, New Zealand. Unpubl. M.Sc. thesis, Lincoln University, Christchurch.
- Wilkinson, A.S.; Wilkinson, A. 1952. *Kapiti bird sanctuary: a natural history of the island*. Masterton Printing Co., Masterton.

Breeding success – % nesting success, reasons for failed attempts, predators at nests, responses to pest control

- Brown, K.; Innes, J.; Shorten, R. 1993. Evidence that possums prey on and scavenge birds' eggs, birds and mammals. *Notornis* 40: 169-177.
- Clout, M.N. 1990. The kereru and its forests. *Birds International* 2: 10-19.
- Clout, M.N., Gaze, P.D., and Hay, J.R. 1988. Clutch overlap by a New Zealand pigeon. *Notornis* 35: 59-62.
- Clout, M.N., Karl, B.J., Pierce, R.J. and Robertson, H.A. 1995. Breeding and survival of New Zealand Pigeons (*Hemiphaga novaeseelandiae*). *Ibis* 137: 264-271.
- Coad, N.J. 2001. *Trounson Kauri Park annual report 1999-2000*. Unpubl. report, Northland Conservancy, Department of Conservation, Whangarei.
- Department of Conservation. 2002. *Kukupa, native wood pigeon, survival guide*. Northland Conservancy, Department of Conservation.

KERERU NEWS No 63

- Flux, I.A., Powlesland, R.G., Dilks, P.J., Grant, A.D. 2001. Breeding, survival and recruitment of Chatham Island pigeon (*Hemiphaga chathamensis*). *Notornis* 48: 197-206.
- Innes, J.; Nugent, G.; Prime, K.; Spurr, E.B. 2004. Responses of kukupa (*Hemiphaga novaeseelandiae*) and other birds to mammal pest control at Motatau, Northland. *New Zealand Journal of Ecology* 28: 73-81.
- James, R.E. 1995. Breeding ecology of the New Zealand pigeon at Wenderholm Regional Park. Unpubl. MSc thesis. University of Auckland, Auckland.
- Jones, G. 2000 Five-minute bird count surveys. Pp. 66-72 in: Beaven, B.; Burns, B.; Harrison, A.; Shaw, P. (Eds), Northern Te Urewera ecosystem restoration project annual report, July 1998 – June 1999. Hawkes Bay Conservancy, Department of Conservation, Gisborne.
- Langham, N.D. 1991. The ecology of the kereru or New Zealand pigeon (*Hemiphaga novaeseelandiae*). DSIR Land Resources Contract Report No. 91/45. DSIR Land Resources, Havelock North.
- Medway, D.G. 2006. The birds of Pukeiti. Zenith Publishing, New Plymouth.
- Powlesland, R.G.; Wills, D.E.; August, A.C.L.; August, C.K. 2003. Effects of a 1080 operation on kaka and kereru survival and nesting success, Whirinaki Forest Park. *NZ J of Ecology* 27: 125-137.
- 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. Pp. 282-286 in *Proc. 22nd Vertebr. Pest Conf.* (Eds Timm, R.M. & O'Brien, J.M.).
- Schotborgh, H.M. 2005. An analysis of home ranges, movements, foods and breeding of kereru (*Hemiphaga novaeseelandiae*) in a rural-urban landscape on Banks Peninsula, New Zealand. Unpubl. M.Sc. thesis, Lincoln University, Christchurch.
- Tunnickliffe, G.A. 1980. Native pigeons breeding in Christchurch. *OSNZ News* 15: 3.
- Wilkinson, A.S.; Wilkinson, A. 1952. Kapiti bird sanctuary: a natural history of the island. Masterton Printing Co., Masterton.
- Kereru News No. 46.
- Kereru News No. 47.