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Rain-bathing by pigeons

According to Goodwin (1983), many pigeons, including species in the genera *Columba*, *Streptopelia*, *Zenaidra* and *Ducula*, adopt similar postures when rain-bathing. "These consist of leaning over to one side, lying partly on one wing and raising the other so that the rain can fall on its under surface and on the flanks". Writing of Australian species, Frith (1982) commented: "Most pigeons frequently bathe in the rain," and "in the totally arboreal species no other method is known"; he included an illustration of a brown pigeon (*Macropygia amboinensis*) rain-bathing in the typical posture. The only published records of New Zealand pigeons (*Hemiphaga novaeseelandiae*) rain-bathing, that we know of, are those of Guthrie-Smith (1927) and Atkinson (1946). As this behaviour is recorded so seldom, we report our own observations and review others.

At 0730 hours (NZDT) on 9 March 1990, JAG saw a pigeon rain-bathing high in some tall eucalypts off Wairere Road on the Western Hutt hills. The morning was overcast with an air temperature of 17°C.; light rain was falling for the first time for several weeks. This bird was soon joined by five others, all of which at times rain-bathed together. They postured as Goodwin (1983) described, except that one bird sometimes raised both wings together and waved them around. As it is unusual to see more than two pigeons together here, the presence of six together suggests that rain-bathing may be infectious (see below). The rain and the bathing ceased after about 45 minutes, although there were still three pigeons there 4 hours later. Again, at 0800 hours on 15 November 1992, JAG saw two pigeons rain-bathing for about 30 minutes in the same trees, in steady rain after 2-3 weeks' dry weather. JECF also remembers a pigeon rain-bathing in the Orongorongo Valley several years ago: it was perched high in a tree and raised its wings alternately 45° beyond the vertical so that the rain ran down under its wings.

Other records of pigeons rain-bathing include those by Nelson (1968) for Galapagos Doves (*Streptopelia galapagensis*), Slater (1987) for the Australian Crested Pigeon (*Ocyphaps lophotes*), Lawson (1988) for the Woodpigeon and Anon. (1984) for the Turtle Dove (*Streptopelia turtur*), both

in Britain. Cramp and Simmons (1985) recorded rain-bathing by the Collared Dove (*S. decaocto*), "once communally", and by the Turtle Dove. Nelson (1968) also remarked that "A sudden shower immediately stimulated all the [Galapagos] doves to. . . keel over, raising one wing vertically so that the undersurface caught the rain. Our own feral pigeons (*Columba livia*) rain-bathe by spreading their wings so that the upper (!) surface catches the drops". Mick Clout recalls (*in litt.*) that he and Rod Hay saw single New Zealand Pigeons rain-bathing near Pelorus Bridge, Nelson, on a few occasions during hundreds of hours watching from 1984 to 1991. Do N.Z. Pigeons also bathe in shallow water on the ground; and if so, when?

Goodwin (1983) commenced that pigeons may also posture like this when sun-bathing - as seen by T.R.E. Southwood when a Woodpigeon (*Columba palubus*) was sunning on the ground (Gibb 1947). N.Z. Pigeons often sun themselves in tall trees, but we have only one record of a bird raising its wings while doing this. People visiting the Orongorongo Valley Field Station are encouraged to record anything that attracts their attention: the 90-odd references to pigeons include one by Brian Gill who, on a fine day in December 1974, watched a pigeon drinking from a puddle on an upturned 44-gallon drum. Between drinks it "sun-bathed by extending its wings down towards and over its legs and feet, and by lifting its right wing high over its back so that the underparts were exposed to the sun".

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Natal down of the Silvereye

Having examined recent hatchlings of the Silvereye (*Zosterops lateralis*) at two nests, I am able to describe the natal down in this species. The first nest, at Kowhai Bush near Kaikoura on 13 January 1978, contained two nestlings; the second nest, at Pukekohe on 31 January 1994, contained three. One of the Kaikoura nestlings had damp down and was newly hatched; it weighed 1.2 g.