

Feather Fascination!

with local Birdwatcher,

Jim Butler

"Milk" from Both Parents

THE Pacific Emerald-Dove (*Chalcophaps longirostris*) has the honour of being named by the mighty Linnaeus himself who studied a specimen in 1758. Linnaeus is famous for formalising binomial nomenclature, the scientific system of naming organisms. The Emerald-Dove (25cm) is one of the 22 species of "pigeons" and "doves" (synonyms) that breed on mainland Australia. Pigeons are a significant component of



Australia's avifauna, living in diverse habitats and providing important ecosystem services e.g. transporting seeds. Emerald-Doves live across the top-end of Australia and down the entire east coast. They are usually found on the forest floor searching for fallen fruit and seeds, and only use trees when roosting.

Pigeons, Greater Flamingos and male Emperor Penguins are a unique subset of birds in that they feed their chicks nutrients secreted by their own bodies. Pigeons produce "crop milk" (high in protein, fat, vitamins), a secretion from the adult crop. Crop milk formation starts about Day 8 of incubation when the crop lining thickens; and by Day 18 the nutritive crop lining sloughs off the whitish mass comprising crop milk. The milk is then transferred by mouth to the newly hatched chicks. The chemical composition of crop milk is similar to mammalian milk and both are triggered by the hormone prolactin.

Pigeons' crop milk is produced by both parents and forms the chicks' sole diet for the first five days after hatching. Following that period, the chicks are fed a mixture

of seeds and crop milk. The secretion of crop milk continues until about 20 days post-hatch. As a result of being fed highly nutritious crop milk, pigeon chicks have a uniquely high growth rate. The young of no other animal can match the pigeon chicks' 22-fold increase in body weight in their first three weeks. The biparental feeding of the chicks to achieve this high growth rate, however, produces enormous energy demands on the bodies for both parents.

Pigeons uniquely care!

~ Jim



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Digital Bird Guide:
<http://www.moggillcreek.org/>

Images: Male Pacific Emerald-Dove,
at Brookfield by Ed Frazer; Chicks with
ears uncovered by Jim Butler.