An Age Character in Australian Fruit-Doves

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Many members of the fruit-dove genus *Ptilinopus*, of which there are 47 species (Goodwin 1967), have an emarginated outer primary, while in others the tip of the primary tapers to a point (Figure 1). The shape of this primary has been used as a taxonomic character in subdividing the genus.

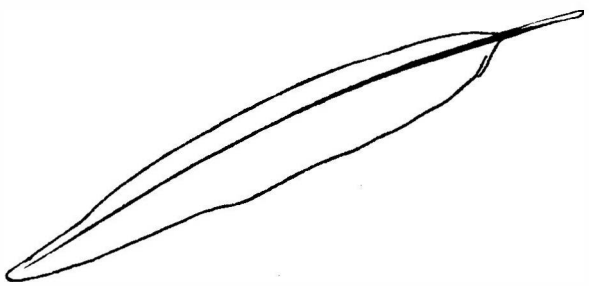
Of the four Austalian species, three, the Rose-crowned Fruit-Dove *P. regina,* Superb-crowned Fruit-Dove *P. superbus* and Banded Fruit-Dove *P. cinctus* have the emarginated outer primary, while in the Wompoo Fruit-Dove *P. magnificus* it is lacking.

The variation in the degree of emargination has been noted by Cain (1954) and Goodwin (1967). An examination of different aged individuals of Australian species with this feature shows that there is considerable age-related variation. An immature bird will have an only slightly emarginated primary (Figure 2a). As the bird becomes older, obtaining adult plumage, the depth and usually the length of emargination increases considerably (Figure 2b). The relative age of one bird compared with another can be determined in this manner. Further study is required before it is possible to assign a more absolute age to a given degree of emargination. Variation in emargination does not appear related to the sex of the bird. North (1906) drew attention to this character in *P. superbus*.

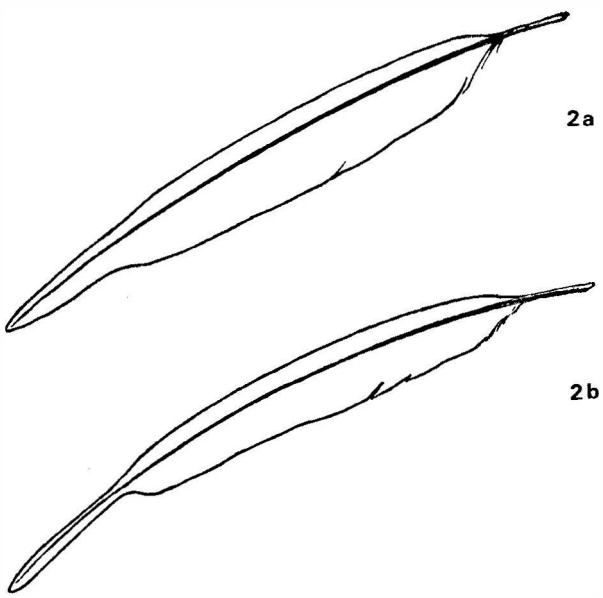
Species in which the primary tapers to a point, such as the Wompoo Fruit-Dove, show very little, if any, age correlated variation in the shape of the feather.

Twenty-seven species of *Ptilinopus* were examined and the shapes of the outer primary listed in Table 1. Twelve showed the emarginated condition and 13 were tapered. Two had an intermediate condition between emarginated and tapered, but only adults were available for examination, thus any change with age could not be determined. Species for which only adults were examined are indicated in Table 1.

It is noteworthy that the divisions of the genus by primary shape correspond closely with the subdivisions of Goodwin (1967).



● Figure 1. *Tapered outer primary as found in Wompoo Fruit-Dove.*



● Figure 2. *Emarginated outer primary as found in Rose-crowned and Superb Fruit-Dove showing relatively greater degree of emargination with age (figure (b) older than figure (a)).*

TABLE 1

Shape of Primary in *Ptilinopus* Fruit-Doves

Emarginated	Tapered	Intermediate
P. alligator (A)	*P. perlata* (A)	*P. iozonus* (A)
P. porphyrea (A)	*P. ornatus* (A)	*P. insolitus* (A)
P. jambu	*P. tennensis* (A)	
P. perousii	*P. aurantifrons* (A)	
P. porphyraceus	*P. wallacei* (A)	
P. pelewensis (A)	*P. rivoli*	
P. richardsii	*P. solomonensis*	
P. purpuratus (A)	*P. viridis* (A)	
P. greyii (A)	*P. eugeniae* (A)	
P. coronulatus	*P. melanospilus*	
P. pulchellus (A)	*P. victor*	
P. monacha (A)	*P. luteovirens*	
	P. layardi (A)	

(A) — Adults only examined.
Others both adults and immatures examined.

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References

Cain, A. J. (1954), 'Subdivisions of the genus *Ptilinopus*', *Bull. Brit. Mus. (Nat. Hist.) Zool.* 2: 265-284.

Goodwin, D. (1967), Pigeons and Doves of the World. London: British Museum (Natural History).

North, A. J. (1906), 'Note on the Superb Fruit-Pigeon, *Lamprotreron superbus,* Temm.' *Vict. Nat.* 23:53.

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Breeding Seabirds of Eddystone Rock, Tasmania

Eddystone Rock is a sheer-sided, flat-topped spire 39 metres high, situated 2.4 km east-north-east of Pedra Branca off the south coast of Tasmania at 43°51′ S., 147°02′ E.

Partly-submerged reefs around the rock make an approach by boat impossible in all but the calmest weather, a rare occurrence in those parts.

It is doubtful if the rock can be climbed without the aid of ropes and there are no records of anyone landing on it. The following observations were made while standing off some 100 m on 7 October 1978.

Apart from the flat top, which has an area estimated to be 10 m^2 there are several small ledges to about half way down the sides. Forty-six Australasian Gannets *Morus serrator* were counted on the summit and these ledges. A number of the birds were sitting on nests, but it was not possible to determine how many were actually incubating eggs. However, on the same day, about 100 gannets were incubating eggs on Pedra Branca (Brothers 1979 *Corella* 3:58-60). One Black-faced Shag *Leucocarbo fuscescens* flew from a nest situated on one of the side ledges.

On 17 April 1947, S. Fowler (*Proc. Roy. zool. Soc. N.S.W.* 47: 22-26), while carrying out an aerial survey of the area, "observed about 20 gannets (apparently all adults) and about 30 white-breasted cormorants on the tower-like Eddystone Rock". He was unable to say whether the rock was used for breeding.

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