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### Allofeeding behavior in wild Pesquet's parrots (*Psittrichas fulgidus*)

Pesquet's parrot (*Psittrichas fulgidus*) is a threatened species listed as Vulnerable on the IUCN Red List (BI 2017). This species is endemic to the large island of New Guinea. It is a unique parrot species due to its relatively flat beak compared to other parrots. The shape of its beak is specialized for feeding on soft fruits, especially *Ficus* and other *Moraceae* species, blossoms, nectar, and possibly insects (Cunningham 1990, Pryor *et al.* 2001). Pesquet's parrot is difficult to observe in the wild due to its sensitivity and habitat, which consists of natural forests that are not overly dense, ranging from elevations of 500 to 1,800 m a.s.l. (Mack & Wright 1998). In addition to the limited ecological information available, BirdLife International (2017) reported that 30–49% of its population declined over three generations (27 years) due to hunting and habitat loss (Mack 1999). The scarcity of information about Pesquet's parrot underscores the importance of documenting and recording even minor observations.

The observation reported here took place on 3 Nov 2023, in a lowland secondary forest at an elevation of approximately 500 m.a.s.l. in the Fef District of West Papua, near the main Trans Papua road and about 400 meters from the village of Iwin (0°50'9"S, 132°28'35"E). This area experiences minimal human activity due to its remote location, with only occasional vehicular traffic. The forest adjacent to the road is relatively open, gradually transitioning into denser vegetation further from the road. The denser areas are dominated by *Syzygium* spp., which grow to around 20 meters in height, alongside *Ficus* spp. and other large trees.

In the morning at about 09:00 hr local time, a pair of Pesquet's parrots was observed perching on a *Ficus* tree (Moraceae). Morphological differences were noted between the sexes: the male displayed a red-colored belly, while the female's belly was predominantly black (Parr & Juniper 2010). Although both individuals were similar in size, the male appeared slightly larger. At 09:04 hr, the male was observed approaching the female and offering her a *Ficus* fruit (Fig. 1). The fruit was bright yellow and oval-shaped and was ripe and soft, in contrast to the shiny green appearance of unripe fruit. Interestingly, the fruit was not offered whole; rather, it had been partially torn by the male before being fed to the female. While the exact species of *Ficus* consumed remains unidentified, this feeding interaction highlights the pair's reliance on soft, ripe fruits.



**Figure 1.** Pesquet's parrot (*Psittichas fulgidus*) (A) feeding on a ripe *Ficus* fruit; (B) the unique behaviour of a Pesquet's parrot pair, with the male allofeeding the female

Allofeeding behavior has been recorded in Pesquet's parrot at the San Diego Zoo, where the female solicited food from the male instead of

taking it directly from the feeding station provided (Witman & Lewins 2000), but to our knowledge, has not been reported previously in the wild. This behavior is also recognized in other bird families, such as hornbills (Bucerotidae), serving multiple purposes, including strengthening pair bonds, mate provisioning, and aiding in offspring rearing (Luescher 2006). In parrots, this behavior is commonly associated with breeding, encompassing both courtship rituals and the provisioning of food to the incubating female (Witman & Lewins 2000). Documenting allofeeding behavior in wild Pesquet's parrots provides important insights into their social interactions and breeding strategies. Furthermore, these findings enhance our knowledge of this poorly known species' ecological needs and reproductive behavior, contributing vital knowledge that is critical for supporting its long-term survival in the wild.

**Acknowledgements.** This work was supported by the West Papua Nature Conservation Agency and the National Research and Innovation Agency through the West Papua Bird-of-Paradise inventory program. We thank the Tambrau Bird-of-Paradise inventory team and the residents of Iwin Village for their invaluable assistance and collaboration; Rowan Martin (World Parrot Trust), Thomas H White, Jr. (US Fish and Wildlife Service), and George Olah (Australian National University) for reviewing the manuscript.

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Submitted: 18 Dec 2024, Accepted: 21 Jun 2025  
Subject Editor: Rowan Martin

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