

# **A Living ‘Rawnsley’s Bowerbird’ — An Adult Male Resulting from a Hybridisation in the Wild between a Regent *Sericulus chrysocephalus* and a Satin *Ptilonorhynchus violaceus* Bowerbird**

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## **Summary**

‘Rawnsley’s Bowerbird’, originally and erroneously described as the species *Ptilonorhynchus rawnsleyi* (Diggles 1867) from an individual specimen in adult male plumage, appears to be the result of a hybridisation in the wild between a Regent *Sericulus chrysocephalus* and a Satin *Ptilonorhynchus violaceus* Bowerbird. The unique skin specimen of this hybrid disappeared before 1950 and another example was not recorded until the presently reported sightings, here supported by digital image evidence (20 October 2004), of a living adult individual at Beechmont, Queensland, adjacent to Lamington National Park.

## **Introduction**

‘Rawnsley’s Bowerbird’ was originally described and illustrated as the new species *Ptilonorhynchus rawnsleyi* (Ptilonorhynchidae) by a hand-coloured plate in part 15 (issued in 1867) of the now extremely rare three-volume (and unfinished) *The Ornithology of Australia* by Silvester Diggles (1866–70). The unique adult specimen of Rawnsley’s Bowerbird, collected at Witton, near Brisbane, Queensland, on 14 July 1867 by Henry Charles Rawnsley, has to date been regarded by various authors to have represented: (a) a valid bowerbird species *P. rawnsleyi*, (b) an adult hybrid individual resulting from the natural crossing of a Regent Bowerbird *Sericulus chrysocephalus* with a Satin Bowerbird *Ptilonorhynchus violaceus*, or (c) an aberrant or ‘sport’ individual of the Satin Bowerbird.

A comprehensive review and consideration of all facts associated with this odd taxon led to the conclusion that it must represent a wild hybrid between the Regent and the Satin Bowerbird (Frith & Frith 2004; C. Frith unpublished data). Both of these bowerbird species breed polygynously, their promiscuous males building bowers of the ‘avenue’ type that they decorate with various objects and to which they attract multiple females during each breeding season in order to there court and mate with them (Frith & Frith 2004).

The only specimen and known example of this intergeneric bowerbird hybridisation was in adult male plumage. It was predominantly of the all-glossy blue-black appearance of an adult male Satin Bowerbird but differed in having a conspicuous extensive yellow wing-patch, fine yellow tipping to some tail-feathers, a paler and more dilute iris colour, and was of a size intermediate between an average-sized adult male Satin Bowerbird of the southern or nominate subspecies *P. v. violaceus* and a Regent Bowerbird (see Plate 4). The gonad condition of this bird was never mentioned and it is therefore possible that it may have been sterile. Unfortunately the unique specimen, never held as part of any institutional collection but last known to have been in the hands of the widow of Henry Charles



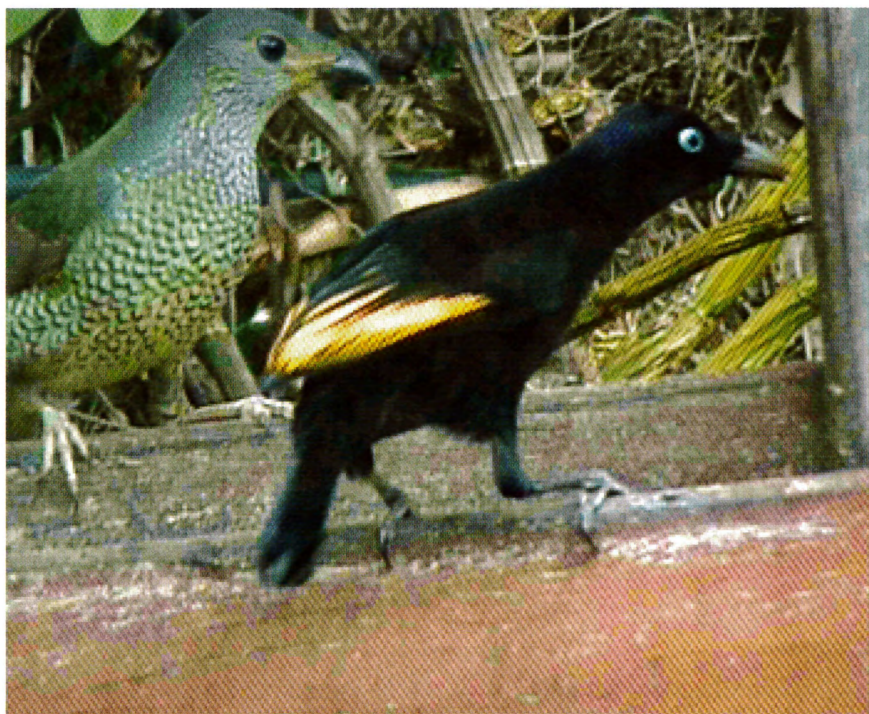
**A reproduction of the hand-coloured illustration of the unique 'type' specimen of *Ptilonorhynchus rawnsleyi* painted and published by Diggles (1867).**

Plate 4

Photo: Clifford B. Frith

Rawnsley, mysteriously disappeared some time before Tom Iredale wrote his monograph about the bowerbirds and the birds of paradise (Iredale 1950).

Augustus C. Gregory (1819–1905), Surveyor-General of Queensland (Whittell 1954), upon being shown the specimen of Rawnsley's Bowerbird by Charles Coxen (John Gould's brother-in-law and his agent resident in Australia; Datta 1997) of Brisbane, claimed to have seen such a bird on the Suttor River, a branch of the Burdekin River, more than a decade before the specimen was collected. Gregory's identification was, however, quite correctly seriously doubted at the time by his field companion Dr Elsey who 'for some time very naturally imagined he Mr G. [Gregory] might have made some mistake' (Coxen *in litt.* to John Gould 20 October



**Adult male presumed hybrid Regent x Satin Bowerbird, with female-plumaged Satin Bowerbird, of unknown sex, 20 October 2004, Binna Burra, Queensland.**

Plate 5

Photo: Daniel Blunt

1867). This letter is now held in the zoology library of the Natural History Museum, London. John Gould (1869) also doubted that Gregory saw such a bird. There is no doubt that Gregory's memory failed him: he possibly confused a sighting of a Common Koel *Eudynamys scolopacea* at the location in question, which is well out of the range and appropriate habitats for both Regent and Satin Bowerbirds (C. Frith unpublished data).

No second specimen or any sighting of an individual apparently resulting from hybridisation between the Regent and Satin Bowerbirds has been collected or recorded respectively.

## Observations

On 1 November 2003 DB noticed through the window of his house at Beechmont (28°10'S, 153°11'E, 661 m above sea-level), 2 km from Binna Burra and adjacent to Lamington National Park, Queensland, an odd-looking bowerbird perched on a domestic fowl pen. Intrigued as to what the bird was, he pursued it to find it perched high in a New England Blackbutt *Eucalyptus andrewsii*. Using an Olympus C-750 digital camera and its 10× optical zoom several images were taken of the bird, with two subsequently proving of particular interest for identification (but not included here). Upon further investigation, he learned that



Stuart Skeen (SS) had several garden bird-feeders in the area of the sighting and so he contacted him. SS responded that he had noticed a bird fitting DB's description, the bird apparently being an intermittent visitor to the feeders. DB identified the bird from Raftopoulos (1988). DB revisited the site several times to obtain better images but the bird did not reappear while he was there. Using a disposable compact camera, SS was able to obtain a photographic image of the bird, which was the only other reasonable image obtained.

In the field DB recorded the bird as generally behaving more like a Satin Bowerbird than a Regent Bowerbird, but as it perched and crouched on a branch it did exhibit behavioural movements like those of a Regent Bowerbird. SS also noted that the bird associated with Satin Bowerbirds and joined their flocks. SS thinks that the bird might also have attended his bird-feeding station in sub-adult plumage during 2002–03 (when it already had some of the yellow wing-plumage). If this were so, then the individual concerned would have been seven years of age toward the end of 2003, given what is known of the attainment of adult-male plumage in Satin and Regent Bowerbirds (*cf.* Frith & Frith 2004).

A bird of this appearance, in all probability the same individual, was seen again in the same immediate area by SS and DB during the first week of October 2004 (as this paper was accepted). On 20 October 2004, using a Sony Handicam Digital 8, DB recorded images of this bird. The picture in Plate 5 is from a single frame of this digital sequence.

## Discussion

Although the image presented here of the living bird is of relatively poor quality because of the difficult conditions prevailing at the time and limitations of the equipment used, it does provide adequate evidence in support of DB's observations and of our interpretation of the bird's origin. The image herein shows that the living bird had the appearance, general proportions and characteristics of an adult male Satin Bowerbird but differed from that taxon in that it had a large conspicuous area of bright yellow on its secondaries, it had obviously paler (less blue and more aqua-green) irides, and a shorter and darker bill and dark legs (see Plate 5). Plate 5 also shows the bird's size and proportions in comparison with a Satin Bowerbird.

We have no doubt that the adult-plumaged individual depicted in the image represents a living example of the result of a hybridisation in the wild between a Regent and a Satin Bowerbird. Diggles (1867) erroneously described this hybrid as the species Rawnsley's Bowerbird. As it is inappropriate that a wild hybrid bird be given a common name (and of course it is seriously erroneous that it be given a scientific one), the name Rawnsley's Bowerbird can only be used informally.

Wherever breeding populations of these two bowerbird species occur sympatrically such a hybridisation must be considered a possible, if exceedingly rare, event. The two bowerbird genera involved, *Sericulus* (consisting of the Regent Bowerbird and three 'silky' bowerbird species of New Guinea) and *Ptilonorhynchus* (consisting of only the Satin Bowerbird), are closely related and at least one authority has suggested they should be combined (Storr 1973, 1984). However, this suggestion has not been followed (Frith & Frith 2004 and references therein).

That congeneric bowerbird species of the genera *Amblyornis*, *Sericulus* and *Chlamydera* do hybridise in the wild has been confirmed (Frith & Frith 1995, 1998, 2004). A large number of intergeneric bird-of-paradise hybrids, many also

involving two polygynous species with dramatically differing adult male plumages (Frith & Beehler 1998), may be seen as supporting potential hybridisation between the polygynous and morphologically distinctive Regent and Satin Bowerbirds. It is, however, remarkable that no such hybrid has ever been so much as vaguely alluded to by a single one of the many birdwatchers annually visiting areas where these two bowerbirds commonly share breeding habitat (e.g. Lamington National Park) since 1867. Until, that is, the above dates of 2003 and 2004.

## Acknowledgements

We sincerely thank Stuart Skeen for kindly permitting DB to visit his property and for showing us his photographic image of the living hybrid bird. DB is grateful to Barry Davies for kindly making his copy of Raftopoulos (1988) available to him for initial identification of the bird. CF thanks Ann Datta, Librarian at The Natural History Museum, London, for kindly providing details of original John Gould correspondence held in that institution. Stephen Debus, Dawn Frith and Andrew Ley kindly commented on a draft of this note.

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