

GENERIC ALLOCATION OF THE TAWNY-CROWNED HONEYEATER

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INTRODUCTION

The genus *Glyciphila* Swainson 1837 was proposed for the Tawny-crowned Honeyeater *G. melanops*. Subsequent authors have at various times placed as many as six other species in this genus. These fall into several natural groups which, other than being small slender honeyeaters with thin, slightly curved bills, have little else to suggest that they form a natural assemblage. Mees (1961) considered *Glyciphila* to be an artificial grouping and Salomonsen (1967) allocated all the species to other genera, disbanding *Glyciphila* altogether. Among Salomonsen's changes was the combination of four species of *Glyciphila* (*melanops*, White-fronted Honeyeater *albifrons*, Barred Honeyeater *undulata* of New Caledonia and White-bellied Honeyeater *notabilis* of New Hebrides) and two species of *Meliornis* G.R. Gray 1840 (New Holland Honeyeater *novaehollandiae* and White-cheeked Honeyeater *nigra*) with the Crescent Honeyeater *Phylidonyris pyrrhoptera*, with this new arrangement taking the oldest name, *Phylidonyris* Lesson 1831.

This treatment for the Australian species was followed by Schodde (1975) who noted differences between *melanops* and the other species but felt that its inclusion in *Phylidonyris* was preferable to maintaining it in a separate, monotypic genus. We consider that these differences and others not cited in that paper warrant the retention of *Glyciphila* for *melanops*, a course also followed by Colston *in* Hall (1974).

While we are acquainted with all Australian species in the field and in the hand, we have no field experience with *undulata* of New Caledonia and *notabilis* of New Hebrides.

GENERIC CHARACTERS OF *MELANOPS*

Adult plumage patterns

The four Australian *Phylidonyris* species other than *melanops* are all patterned black and white with prominent yellow edging to the flight feathers. Two of these, *P. novaehollandiae* and *P. nigra*, are particularly close. *Phylidonyris pyrrhoptera* is the most different

in pattern. It exhibits sexual dimorphism in plumage but shares with the other black and white species characters which indicate that they are related (see below). In contrast, adults of *melanops* are various shades of white and brown. There is some superficial resemblance in pattern between *melanops* and *P. pyrrhoptera*: they lack the distinctive black and white mottling of the other species. Both have dark crescent-shaped marks on the sides of the upper ventral surface which have been suggested as an indication of relationship; however in *melanops*, these are on the sides of the lower throat, while in *pyrrhoptera* they are on the breast, further towards the centreline of the body.

Juvenile plumage patterns

An important distinction between *melanops* and the Australian *Phylidonyris* is the plumage pattern of the juvenile bird. (Juvenile [=juvinal] plumage is used here in the sense of Dwight (1900), *i.e.* the first covering of true contour feathers following the natal down). In most honeyeaters, including the four black and white species, the juvenile's pattern is a dull version of that of the adults. In *melanops*, the juvenile is heavily streaked and has a yellow throat, a pattern quite unlike the adult's (see plate 78 in Pizzey 1980). It also lacks the adult's dark crescent and sagittate markings on the breast and distinctive tawny crown. While a transient yellow throat appears in the young of several varied and not closely related genera of honeyeaters, *e.g.* *Philemon*, *Conopophila*, *Cissomela*, etc., it does not occur in the black and white *Phylidonyris*. The streaked pattern of juvenile *melanops* is not found in any other Australian honeyeater and we interpret it as a uniquely derived character state in the Meliphagidae.

Nestling mouth markings

We have found that in nestlings of most Australian passerines the inside mouth is yellow-orange in colour and lacks any markings (Boles & Longmore, 1985), a state we consider to be the ancestral condition. In honeyeaters,

we found this condition and four other, different patterns of markings, including one restricted to *P. nigra*, *P. novaehollandiae* and *P. pyrrhoptera*. This pattern consists of a yellow-orange edge to the mouth while the remainder of the buccal cavity and pharynx is black (Maclean & Vernon 1976; Boles & Longmore, 1985: Fig 1i; Reader's Digest 1976: 496, 498). In *P. albifrons* and *melanops* there are no such markings. We interpret the unusual mouth-marking of the other three species as a uniquely derived character state within the Meliphagidae. Its absence in *P. albifrons* does not mean that this species does not belong to *Phylidonyris*; the plumage similarities support this species' inclusion in that genus. It means that *nigra-novaehollandiae-pyrrhoptera* are more closely related to each other than any is to *albifrons*. The retention of the ancestral condition in *P. albifrons* and in *melanops* offers no taxonomic information and cannot be used to support a relationship between these two or between *melanops* and any other species (see Hennig 1966).

Display flights

The presence of similar display flights (a rapid rise above the vegetation followed by a quick return to foliage) in *melanops*, *P. novaehollandiae* and *P. nigra* has been cited as supporting evidence of their relationships (Schodde 1975). Other varied species such as the Red Wattlebird *Anthochaera carunculata*, Spiny-cheeked Honeyeater *Acanthagenys rufogularis*, Noisy Friarbird *Philemon corniculatus*, White-plumed Honeyeater *Meliphaga penicillata* and Brown Honeyeater *Lichmera indistincta* also have displays of this general pattern (pers. obs.). The peculiar display flight of *melanops* includes a slower spiralling descent from the zenith of its rise. *Phylidonyris pyrrhoptera*, a woodland species, lacks this display (H.F. Recher, pers. comm.) but has a much stronger and more varied call than *novaehollandiae* and *nigra* and unlike them, advertises its territory by song (D.C. Paton, pers. comm.). We have not observed an aerial display in *P. albifrons* but field data on this species are meagre.

Maxillo-palatines

Mr S.A. Parker (pers. comm.), who is carrying out a survey of the structure of the maxillo-palatines in Australian passerines, has informed us that this feature differs between *melanops*

and other species. In *novaehollandiae*, *pyrrhoptera* and *albifrons*, the maxillo-palatines are vacuolated and bulbous, whereas in *melanops*, they are flat. A more detailed account of the variation of this character will be published by Parker.

Eggs

The eggs of *Phylidonyris* usually have a pale salmon-buff ground colour with darker brown or reddish-brown spots and dots, underlaid with pale lavender-grey ones, often forming a wreath at the larger end. Eggs of *melanops* are consistently paler with fewer markings and are, on average, larger in size (Campbell 1900; North 1906; pers. obs.). "Typically the eggs [of *melanops*] may be distinguished from those of any other Honey-eater by the sparseness and washed out appearances of their eggs. . ." (North 1906: 73).

DISCUSSION

Because of the differences given here, we consider it advisable to recognize the genus *Glyciphila* for *melanops*. The distribution of presumably derived nestling and juvenile characters, as well as other differences between *Glyciphila* and *Phylidonyris*, indicates that they may not be each other's nearest relative; other yellow-winged genera such as *Trichodere* may be closer to *Phylidonyris*. Once superficial morphological similarities are disregarded, there are no compelling characters to ally *Glyciphila* more closely to one genus than to another, thus we consider it preferable to express the notion by retaining it, despite being monotypic. When further information, particularly anatomical comparisons, become available, it may then prove preferable to merge these genera. Data at present, however, are inadequate to support such action.

A cursory examination of specimens of the extra-limital forms, *undulata* and *notabilis*, did not suggest any convincing reason to believe that they are more closely related to Australian *Phylidonyris* than to any of several other honey-eater genera. M.D. Bruce (pers. comm.) who has seen these two species in the field does not feel that they are particularly close to *Phylidonyris*. A series of photographs in Hannecart & Letocart (1980: 56-57) shows the nest, eggs, and adult and nestling plumages of *undulata*; the nestling mouth colour is unmarked yellow-orange. That these characters occur in

notabilis should be tested as should the displays of both species. If separated generically, they would take the name *Glycifolia* Mathews 1929.

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