A possible hybrid Black-faced x Spectacled Monarch in north Queensland

John D. Grant

Mailbag 71, Yungaburra Qld 4884, Australia. Email: *ptiloris@yahoo.com.au*

Abstract

A monarch flycatcher with plumage indicative of a possible hybrid between Black-faced *Monarcha melanopsis* and Spectacled *Symposiachrus trivirgatus* Monarchs is reported. Hybridisation between these species is hitherto undescribed.

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An unusually plumaged monarch flycatcher (Fig. 1) was found on 6 October 2009 in replanted riparian vegetation along Peterson Creek at Allumbah Pocket, Yungaburra, north Queensland (17°16'13.00", 145°34'45.47"). First impression was of a Black-faced Monarch *Monarcha melanopsis*, with shape, general plumage tones and apparent size matching this species. Closer views over a period of approximately ten minutes showed a number of anomalies, the most obvious being a black mask encompassing the eye and ear-coverts, patchy orange-rufous feathering on the cheeks and upper

Figure 1. Monarch flycatcher with unusual plumage features, Yungaburra, north Queensland, October 2009. Photo by J.D. Grant.

breast, and whitish panels in the outer tail feathers. These features were more indicative of Spectacled Monarch *Symposiachrus trivirgatus* and effectively ruled out *M. melanopsis*. However, not all the plumage features were assignable to *S. trivirgatus*, in particular patchy grey feathering forming an irregular narrow breastband and the wholly rufous abdomen (*S. trivirgatus* has a white belly, usually clearly demarcated from the orange-rufous breast). In addition, the white of the tail was neither as bright nor as extensive as on typical *S. trivirgatus.* In summary, the bird's plumage combined features of the two species to such an extent that the most parsimonious explanation is that it is a potential hybrid. The 'mixed' feathering on the cheek and upper breast and the subdued white of the tail were especially strong intermediate features supporting this conclusion. A comparison of plumage features between the presumed hybrid and the two presumed parent species is shown in Fig. 2. The bird was not heard to call so its voice could not be assessed for similarity to either species. Attempts to relocate the bird over the following days were unsuccessful.

Hybridisation between these species is apparently unknown (McCarthy 2006; Ottenburghs 2020), and within the Monarchidae hybrids are rarely reported. A presumed intergeneric hybrid as recorded here might be more expected in families where intrageneric hybrids are commoner; even though Spectacled and Black-faced Monarchs have until recently been considered to be congeneric, *Monarcha* and *Symposiachrus* are strongly

Figure 2. A comparison of plumages showing the presumed hybrid monarch (centre) with adult-plumaged Black-faced (rear) and Spectacled (front) Monarchs. Illustration by J.D. Grant.

differentiated genetically (Filardi & Smith 2005; Christidis & Boles 2008). Hybridisation within *Monarcha* may be suggested by recent records of unusually-plumaged black-faced type monarchs from the Julatten area in north Queensland, which show some features of Black-winged Monarchs *M. frater* (Nielsen 2015). However these two species are not known to overlap in breeding range and this unexpected scenario deserves further investigation. In the present case, the two presumed parent species overlap in range and habitat extensively in coastal and upland areas of eastern Australia including the Atherton Tablelands (Higgins *et. al.* 2006), but significantly different plumages and especially pronounced differences in voice presumably act as isolating mechanisms. In the breeding season in north Queensland, *S. trivirgatus* is common in the forest interior while *M. melanopsis* is mostly associated with forest edges and gaps (Grant 2002), so some habitat differentiation may also contribute to maintaining genetic barriers; nevertheless the two are often recorded in close proximity and it is perhaps surprising that hybrids have not been detected previously.

Given the time of year, this bird may have been a locally-produced hybrid (at least one year old given the extent of the mask which indicates adulthood in either species) or a migrant from more southerly areas where these two species also overlap.

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