Australian Field Ornithology 2013, **30**, 188–195

'Masters's Rosella *Platycercus mastersianus*': An obscure intrageneric hybrid parrot reviewed, with two recent records from the wild

Clifford B. Frith

P.O. Box 581, Malanda QLD 4885, Australia
Email: frithandfrith@bigpond.com

Summary. Records of hybridisation between the Crimson Rosella *Platycercus elegans* and Pale-headed Rosella *P. adscitus* in the wild are few and have few associated data. Only one undoubted museum specimen exists, named *P. mastersianus* (Masters's Rosella) by Edward P. Ramsay in 1877. Records of this hybrid involve only the southern, nominate, subspecies of the Crimson Rosella *P. e. elegans*. The history of this hybrid in museum collections, in captivity, and in the wild is reviewed. Two recent and previously unpublished records of individuals from the wild are illustrated and discussed; for the first time, the northern subspecies of the Crimson Rosella *P. e. nigrescens* is involved. One of these birds is preserved as a skin specimen resulting from a road-kill near Lake Eacham and the other was a live individual photographed in an Atherton garden, both on the southern Atherton Tableland, north Queensland.

Introduction

Forshaw (1989, p. 243) divided the eight species of Australian *Platycercus* rosella parrots that he acknowledged at the time into two distinct groups 'differentiated by immature plumage patterns. The *caledonicus-elegans-adelaidae-flaveolus* group, in which immatures are predominantly dull green, is confined to eastern Australia including Tasmania. In the more widespread *eximius-adscitus-venustus-icterotis* group immatures resemble both or one of the adults'. An exception within the former group, however, is that immatures of the northern subspecies of the Crimson Rosella *P. elegans nigrescens* typically look much like the corresponding adults. Forshaw (1989) went on to state 'every species from the *caledonicus* group is sympatric with a species from the *eximius* group and hybridization rarely occurs'. After some debate, the Adelaide Rosella *P. adelaidae* and Yellow Rosella *P. flaveolus* were no longer considered separate species, and are now treated as subspecies of the Crimson Rosella *P. elegans* (Forshaw 2002; Christidis & Boles 2008 and references therein).

Hybridisation between the Crimson Rosella and Pale-headed Rosella *P. adscitus*, in captivity or in the wild, is not mentioned at all in some of the most pertinent avicultural and ornithological literature (e.g. Barrett 1949; Bates & Busenbark 1959; Eastman & Hunt 1966; Cayley & Lendon 1973; Forshaw 1973, 1989; Seth-Smith 1979; Alderton 1991; Crome & Shields 1992; Low 1992; Juniper & Parr 1998; Higgins 1999). It has, however, been noted as occurring in captivity in Britain, the United States of America and elsewhere for over 80 years (Tavistock 1928; Bedford 1954; Groen 1962; Harman 1981; Kolar & Spitzer 1990; McCarthy 2006 and references therein). The crossing of rosella species in captivity is now, quite

Figure 1. Two photographs of the holotype skin specimen (O.23688) named as the new rosella species *Platycercus mastersianus* by Ramsay (1877) and now acknowledged to be a hybrid resulting from a cross between a Crimson and a Pale-headed Rosella. Photos: Carl Bento, copyright and permission of the Australian Museum.

Figure 2. Two photographs of the supposed paratype specimen of *Platycercus mastersianus* (A.10583) in the AM collection, Sydney. Photos: Carl Bento, copyright and permission of the Australian Museum.

correctly, frowned upon and Shephard (1994, p. 96) stated that 'the aviculturalist has a clear responsibility to breed the various species and subspecies true to type'.

Neville Cayley stated that hybridisation between Pale-headed and Crimson Rosellas was 'not yet tried' in captivity, but mentioned the type-specimen (taken from the wild) of '*Platycercus mastersianus*' held at the Australian Museum (AM), Sydney, and stated that it was 'undoubtedly a cross between *Platycercus elegans* and *Pl. adscitus*' (Cayley 1938, pp. 176–177). It is thus surprising that this hybrid from the wild is not mentioned in the most recent major review of the entire Australian avifauna (i.e. Higgins 1999) nor in a recent exhaustive worldwide review of hybrid birds from the wild (i.e. McCarthy 2006). Forshaw (2002) noted this hybrid as having been recorded in the wild and being (erroneously) formally named as the species *P. mastersianus* by Ramsay, but he did not cite the source publication (i.e. Ramsay 1877).

Ramsay (1877) provided only a text description of the plumage of the AM type-specimen (AM O.23688) of '*Platycercus mastersianus*' collected by George Masters some two years previously (but I present photographs of the type-specimen in Figure 1). At a first examination of this male specimen, Ramsay (1877, p. 28) 'had great doubts of its proving to be a good species, being rather inclined, from the great variegation and uniformity of its markings, to consider it a hybrid, or cross between some of the smaller species'. The location for the specimen upon which his description of '*Platycercus mastersianus*' was based is recorded as being the interior of New South Wales (Ramsay 1877).

Referring to a second specimen of this hybrid, Ramsay (1877, p. 28) wrote of 'another [*Platycercus mastersianus*], although immature, but having the same characteristic *red front*, and *upper tail coverts*, blue wings and yellowish-green under surface'. The italics are Ramsay's but the 'yellowish-green under surface' that he noted clearly indicates a probable hybrid (i.e. '*Platycercus mastersianus*'). But Ramsay did not actually state that the bird he described as a second specimen of *P. mastersianus* was in the AM collection—merely that he 'found another' and that is was 'recently obtained in the interior northern portion of New South Wales'. This would appear to suggest that the specimen was indeed then in the collection. It remains to be seen, however, if this 'immature' specimen with 'yellowish-green under surface' of Ramsay (1877, p. 28) does now exist in the AM collection.

In his list of the types and paratypes of Australian birds in the AM, Keith Hindwood (1946) included only the holotype (AM O.23688) of *P. mastersianus*. Another specimen in the AM (A.10583) has, however, subsequently been treated as a paratype of *P. mastersianus* (Longmore 1994), but its mantle coloration and pattern, and particularly its green tertials and wing-coverts, strongly suggest that it is an Eastern Rosella *P. eximius*—albeit an aberrant one in terms of its red underparts (see Figure 2). Two earlier labels attached to this specimen, in the handwriting of Ramsay on one and A.J. North on the other, indicate that it was designated as '*P. mastersii*' [*sic*]. The AM had no separate bird specimen register until about a decade after Ramsay described *P. mastersianus*. By the time specimen A.10583 was entered into the specimen register, it was listed as being '*P. eximius* var' (i.e. a variant form of Eastern Rosella). A label added to the

Figure 3. The painting by Joseph Smit of a *Platycercus mastersianus*-like hybrid at the London Zoo that appeared in a review of all live parrots held there in January 1902 by Philip Sclater (1902).

Figure 5. Live rosella, apparently resulting from a Crimson Rosella × Pale-headed Rosella cross, July 2012, Atherton, north Queensland. Photo: Diane Coppinger.

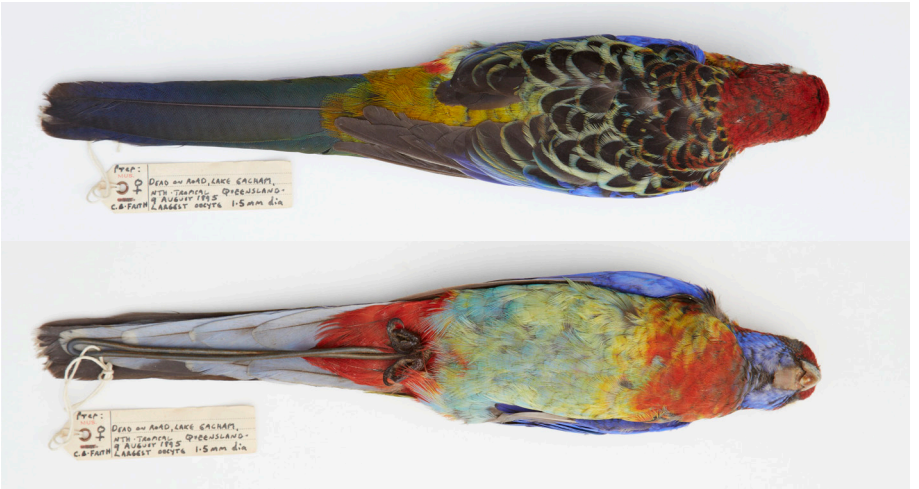

Figure 4. Two photographs of the skin specimen of a hybrid individual rosella apparently resulting from a cross between a Crimson Rosella and a Pale-headed Rosella, from Lake Eacham, north Queensland, 9 August 1995. Photos: C.B. Frith.

specimen some 80 years after that registration has *Platycercus eximius* boldly written on it (see Figure 2, lower) but lacks the 'var' (W.E. Boles pers. comm.). If there is a paratype of '*P. mastersianus*' in the AM, then it would seem probable that it will prove to be the 'immature' specimen with 'yellowish-green under surface' of Ramsay (see above) and not specimen A.10583. In January 2013, specimen A.10583 was re-registered in the AM collection and database as being an aberrant *P. eximius* or possibly a hybrid *P. eximius* × *P. elegans* that shows no *P. adscitus* characters (J. Sladek & M. Eldridge pers. comm. 30 January 2013), following correspondence between CBF, Walter Boles, Wayne Longmore and Jaynia Sladek.

Joseph Smit illustrated a parrot alive at the London Zoo in January 1902 (Sclater 1902, plate xix), identified as *Platycercus mastersianus*—see Figure 3. It was deposited at the zoo on 29 October 1897 by 'Mr. Rothschild'—presumably the zoologist Walter Rothschild. Nothing is said about how Rothschild obtained the bird, and so it may have been imported as a live bird of unknown origin or, perhaps more likely, was a hybrid bred in captivity and sold to Rothschild as a novel 'species'. Sclater (1902, p. 170) stated that the bird 'is clearly a member of the group of *P. elegans*, but differs from all others in having the central parts of the tail-feathers whitish'. Its appearance, although broadly suggestive of a *P. elegans* × *P. adscitus* hybrid, differs significantly from the type-specimen AM O.23688 of '*Platycercus mastersianus*' (compare Figures 1 and 3) in coloration of wings and tail. Thus, although likely to be a *P. elegans* × *P. adscitus* hybrid, given that some variation is to be expected, it is impossible to be sure as some other species could conceivably be involved, particularly if the result of captive breeding.

Arthur Butler dogmatically stated that 'Master's Parrakeet (*Platycercus mastersianus*) is doubtless a variety of Pennant's Parrakeet [Crimson Rosella]' (Butler ca. 1910, p. 220), but Lucas & Le Souëf (1911, p. 216) treated it as the species *P. mastersianus* but acknowledged Ramsay's (1877) view of it as a hybrid as being 'quite possible'.

Hindwood (1946, p. 388) observed that A.J. North of the AM had written on a label attached to the holotype specimen of *P. mastersianus*, 'This specimen is undoubtedly a hybrid between *Platycercus palliceps* [= *P. adscitus*] and *P. elegans*, or an unusually plumaged specimen of the latter'. Gregory Mathews (1916–1917) and Peters (1937) also accepted *P. mastersianus* as being a result of this cross (cf. Schodde & Mason 1997).

Immelmann (1968, p. 126) noted that hybridisation between Crimson and Pale-headed Rosellas in the wild has 'been observed at the southern border of Queensland', and it involves the subspecies *P. elegans elegans* and *P. adscitus palliceps*, respectively. Although the ranges of these two rosella species do overlap, Crimson Rosellas occur predominantly within wet forest whereas Pale-headed Rosellas mostly live in drier and more open vegetation communities.

Recent field observations

On 9 August 1995, Barry Thurling (BT) of Malanda was driving along Lake Eacham Road, near Lake Eacham (17°17′S, 145°38′E), southern Atherton Tableland, north

Queensland. This road was lined on either side by upland rainforest broken by paddocks and gardens. In the middle of the tarmac road stood a typical adult Crimson Rosella immediately beside the freshly dead prostrate body of another rosella that could not be readily identified to species and that had obviously been killed by a vehicle. The adult Crimson Rosella was reluctant to leave the dead bird, remaining with it and calling until BT walked within a couple of metres of it to flush it into adjacent trees, where it continued to call. He collected the dead bird, the primaries of its left wing having been removed by the impact of the car, and gave it to William Cooper, who passed it on to me several days later. I prepared it as a study skin, and in doing so confirmed that it was a female (the largest oocyte was 1.5 mm in diameter) with the skull not quite fully ossified, and that it was probably the result of hybridisation between a Crimson and a Pale-headed Rosella (see Figure 4). This bird had no bands on its legs, and its plumage, beak, and cere showed no sign suggestive of its having been held in captivity. I immediately contacted all known aviculturists in the area, and was informed that none had recently lost a rosella, let alone one fitting the appearance of this bird. This notwithstanding, I did not publish an account of its discovery at the time because of (a) the remaining slight possibility of its being bred in captivity and (b) the rarity of such a hybrid in the wild between the two species, with none reported involving the northern subspecies of the Crimson Rosella. The specimen has been deposited in the AM (specimen number O.74247).

During June 2012, an odd-looking rosella visited the back-garden bird-feeder of Diane and Jack Coppinger, just off the road to the golf course beside the town of Atherton (17°16′S, 145°28′E). It came in association with several typically plumaged Pale-headed Rosellas. It bore no bands, showed no other signs of captivity, and behaved as did the wild rosellas with which it associated. Because of its odd appearance, it was photographed by Diane Coppinger (see Figure 5). Her photographs show it to be similar in most respects to the bird previously collected at Lake Eacham except that it was redder on the rump and had less red on the mantle (compare Figures 4 and 5).

Discussion

There is no doubt that both the bird collected at Lake Eacham and the bird photographed at Atherton (Figures 4 and 5) are the result of the same cross—Crimson Rosella × Pale-headed Rosella, the subspecies involved being *P. elegans nigrescens* and *P. adscitus palliceps*, respectively (cf. Forshaw 2002). Given that these birds were not banded, showed no other signs or behaviour of ever having been captive, associated closely with wild rosellas, and that hybrids between these two species in the wild are known, they can be accepted as wild hybrids. They thus represent the first record of the northern Crimson Rosella subspecies *P. e. nigrescens* being involved in hybridisation in the wild.

Acknowledgements

I thank Barry Thurling for making me aware of the Lake Eacham hybrid specimen, William Cooper for passing it to me, Keith Smith for bringing the live Atherton hybrid to my

attention, and Diane and Jack Coppinger of Atherton for kindly providing details about and photographs of the rosellas visiting their Atherton garden. Walter Boles, Mark Eldridge, Richard Major, Ross Sadlier and Jaynia Sladek of the Australian Museum, Sydney, all kindly responded to requests for images and information from the ornithological collections there, as did Wayne Longmore of Museum Victoria, Melbourne. Wayne Longmore, James Fitzsimons and two anonymous referees kindly commented constructively on a draft of this contribution.

References

Alderton, D. (1991). *The Atlas of Parrots*. T.F.H. Publications, Neptune City, New Jersey, USA.

Barrett, C. (1949). *Parrots of Australasia*. Seward, Melbourne.

Bates, H. & Busenbark, R. (1959). *Parrots and Related Birds*. T.F.H. Publications, Jersey City, New Jersey, USA.

Bedford, The Duke of (1954). *Parrots and Parrot-like Birds*. All-Pets Books, Fond du Lac, Wisconsin, USA.

Butler, A.G. (undated, ca. 1910). *Foreign Birds for Cage and Aviary, Part II the Larger Foreign Birds*. The Feathered World and Canary and Cage-bird Life, London.

Cayley, N.W. (1938). *Australian Parrots, Their Habits in the Field and Aviary*. Angus & Robertson, Sydney.

Cayley, N.W. & Lendon, A.H. (1973). *Australian Parrots in Field and Aviary*. Angus & Robertson, Sydney.

Christidis, L. & Boles, W.E. (2008). *Systematics and Taxonomy of Australian Birds*. CSIRO Publishing, Melbourne.

Crome, F. & Shields, J. (1992). *Parrots and Pigeons of Australia*. Angus & Robertson, Sydney.

Eastman, W.R. & Hunt, A.C. (1966). *The Parrots of Australia: A Guide to Field Identification and Habits*. Angus & Robertson, Sydney.

Forshaw, J.M. (1973). *Parrots of the World*. Lansdowne Press, Melbourne.

Forshaw, J.M. (1989). *Parrots of the World*. 3rd, rev., edn. Lansdowne Editions, Sydney.

Forshaw, J.M. (2002). *Australian Parrots*. 3rd, rev., edn. Alexander Editions, Robina, Qld.

Groen, H.D. (1962). *Australian Parrakeets Their Maintenance and Breeding in Europe*. 3rd edn. Author, Haren, Holland.

Harman, I. (1981). *Australian Parrots in Bush and Aviary*. David & Charles Ltd, Newton Abbot, UK.

Higgins, P.J. (1999). *Handbook of Australian, New Zealand & Antarctic Birds, Volume 4: Parrots to Dollarbird*. Oxford University Press, Melbourne.

Hindwood, K.A. (1946). A list of the types and paratypes of birds from Australian localities in the Australian Museum, Sydney, New South Wales. *Records of the Australian Museum* **21**, 386–393.

Immelmann, K. (1968). *Australian Parakeets*. A. Ziemsen Verlag, Wittemberg, Germany.

Juniper, T. & Parr, M. (1998). *Parrots A Guide to the Parrots of the World*. Pica Press, Robertsbridge, East Sussex, UK.

Kolar, K. & Spitzer, K.H. (1990). *Encyclopedia of Parakeets*. T.F.H. Publications, Neptune City, New Jersey, USA.

Longmore, W. (1994). *Type Specimens of Birds in the Australian Museum*. Technical Reports of the Australian Museum No. 4.

Low, R. (1992). *Parrots Their Care and Breeding*. 3rd, rev., edn. Blandford, London.

Lucas, A.H.S. & Le Souëf, W.H.D. (1911). *The Birds of Australia*. Whitcombe & Tombs Ltd, Melbourne.

Mathews, G.M. (1916–1917). *The Birds of Australia*. Vol. 6. Witherby & Co., London.

McCarthy, E.M. (2006). *Handbook of Avian Hybrids of the World*. Oxford University Press, Oxford, UK.

Peters, J.L. (1937). *Check-list of Birds of the World*, Vol. 3. Harvard University Press, Cambridge, Massachusetts, USA.
Ramsay, E.P. (1877). On a new species of *Platycercus* from the interior of New South Wales. *Proceedings of the Linnean Society of New South Wales* **2**, 27–28.
Schodde, R. & Mason, I.J. (1997). Aves (Columbidae to Coraciidae). In: Houston, W.W.K. & Wells, A. (Eds). *Zoological Catalogue of Australia*. Vol. 37.2, p. 217. CSIRO Publishing, Melbourne.
Sclater, P.L. (1902). List of the parrots represented in the Society's collection in January 1902, with remarks on some of the rarer species. *Proceedings of the Zoological Society of London* **1**, 166–171.
Seth-Smith, D. (1979). *Small Parrots*. Revised by M.M. Vriends. T.F.H. Publications, Neptune City, New Jersey, USA.
Shephard, M. (1994). *Aviculture in Australia, Keeping and Breeding Aviary Birds*. Reed, Melbourne.
Tavistock, Marquess of (1928). *Parrots and Parrot-like Birds in Aviculture*. White, London.

Received 12 December 2012 ■

Thank you, Andrew Ley; welcome, Richard Loyn

After over 13 years of dedicated service as editor for aquatic birds, March 2000 to September 2013, and sometimes reviewing or editing other papers as well, Andrew Ley has resigned, although his efforts will flow on to the December 2013 issue at least. We also gratefully acknowledge his insightful contributions to the deliberations of the *AFO* Editorial Board, including deputising in my absence, and his prior service on the editorial panel from September 1998 to December 1999. Since his seven papers, six short notes and three book reviews in the journal when it was the *Australian Bird Watcher* (see his history of *ABW* in *AFO* **28**, December 2011, 142–149), he has contributed a further two papers, ten co-authored papers, two short notes (one co-authored) and eight book reviews, with more to come. He also edited two island supplements (one in press), and wrote another supplement (a comprehensive account of the birds of Diamantina National Park, arising from his organised surveys there). Andrew was deeply concerned for the future of *AFO*, its 'ownership' and promotion by the parent bodies (BOCA then BirdLife Australia), and the conservation of our declining birds, such as the Regent Honeyeater. His strong opinions and forthright approach will be missed.

Stephen Debus

Richard Loyn has joined the *AFO* team as the new editor for aquatic birds. Richard has a long history and involvement in monitoring of waterbirds, most notably in Ramsar sites of Victoria's Western Port and Port Phillip Bay, but has also published widely on forest birds. He was until recently a principal scientist with the Arthur Rylah Institute for Environmental Research with what is now Victoria's Department of Environment and Primary Industries, where, amongst other things, he managed duck hunting in Victoria and flora, fauna and fisheries operations in Melbourne. He now runs his own consultancy (Eco Insights), and is a research fellow at La Trobe University's Department of Zoology.

James Fitzsimons