AUSTRALIAN MUSEUM SCIENTIFIC PUBLICATIONS

North, A. J., 1904. On heterochrosis in Australian *Psittaci*. *Records of the Australian Museum* 5(4): 265–268. [16 June 1904].

doi:10.3853/j.0067-1975.5.1904.1062

ISSN 0067-1975

Published by the Australian Museum, Sydney

nature culture discover

Australian Museum science is freely accessible online at http://publications.australianmuseum.net.au 6 College Street, Sydney NSW 2010, Australia



ON HETEROCHROSIS IN AUSTRALIAN PSITTACI.

By Alfred J. North, C.M.B.O.U., C.M.Z.S., Ornithologist.

Instances of xanthochroism, partial in most, total in some, are many in the specimens of Australian Psittaci in the Australian Museum. Among them may be mentioned a remarkably fine Black Cockatoo (Calyptorhynchus funereus), presented by Mr. G. M. Pitt, and obtained by him at Wiseman's Ferry, on the Hawkesbury River, New South Wales. This specimen differs from the typical form in having the upper and under surface, upper and under wing-coverts, scapulars, innermost secondaries and under tail coverts yellow, with which are intermingled a number of the usual brownish-black feathers, giving it a distinctly mottled appearance. A Pennant Parrakeet (Platycercus elegans), presented by Mr. W. E. Secombe, has the hind-neck, scapulars, back, breast and abdomen rich yellow; wings white with a faint bluish wash on the lesser and median wing-coverts, tail feathers white with a faint bluish wash, the central pair indistinctly margined with light scarlet. Another specimen of the same species obtained in Victoria has the upper and under parts entirely greenish-yellow except a frontal cap, and broad tips to the feathers on the foreneck, lower flanks and under tail-coverts which are scarlet; cheeks pale blue, quills white, upper wing-coverts like the back except the outer series of the lesser and median coverts which are pale blue, central pair of tail feathers faint greenish yellow washed with light scarlet on their margins, the remainder pale blue. Of Rose-hill Parrakeets (Platycercus eximius), there is a beautiful example presented by Mr. Henry Foster, and obtained by him at Young, New South Wales. It has the hind neck, rump, upper tail-coverts, sides of the breast, abdomen and flanks rich canary-yellow, scapulars and back white with canary-yellow margins to all the feathers, wings white with a faint bluish wash, tail feathers white the central pair tinged with yellow. A tendency to xanthochroism is exhibited in a female King Lory (Aprosmictus cyanopygius), procured in the Clarence River District, New South Wales. It is entirely yellowish-green with the exception of the lower breast, abdomen

and broad margins to the tips of the under tail-coverts, these parts being scarlet. Instances of almost total, and of partial xanthochroism are shown in three examples of the Red-rumped Parrakeet (Psephotus hæmatonotus), procured respectively by Mr. S. Hosie at Dubbo, by the late Mr. J. H. McCooey at Warren, and by Mr. J. A. Daley at Wagga, the former specimen exhibiting traces of the normal colouring in some of the quills and tail feathers, and having all the under surface white with a faint yellowish wash. Most of the specimens referred to above were obtained on dry plains.

When these birds were alive, their abnormal plumage rendered them conspicuous objects in the bush. Consequently they were much sought after, the Black Cockatoo being followed by Mr. Pitt at various times for three months before he shot it. However numerous these singularly plumaged specimens may be in cabinet or exhibit collections, it is seldom one sees these birds in captivity.

For an opportunity of examining an instance of xanthochroism in a living example of the "Buln-Buln" or Barnard's Parrakeet (Platycercus barnardi), I am indebted to Mr. H. B. Bradley, a Trustee of the Australian Museum. This bird which I saw at Mr. Bradley's office on the 18th April, 1904, was he informed me the property of Mr. A. L. Vivers of North Sydney. It was remarkably tame, and had the entire plumage canary-yellow except a dark scarlet band on the forehead and some scarlet feathers behind the eye and on the nape; primaries and under surface of wing white; tail yellowish-white.

Mr. Vivers subsequently informed me that it was one of three taken by a shearer in September, 1901, from a nesting-place in a tree on Burrawang Station, near Forbes, New South Wales. The other young ones were of the normal plumage, and one of these birds is at present in the possession of Mrs. Battye, of Strathfield, near Sydney.

Melanism, as represented by the specimens of Australian Psittaci in the collection, is confined to a single species, and all from the same district. It is a smaller and darker plumaged form of Platycercus elegans, inhabiting the Bellenden Ker Range, and the contiguous coastal districts of North-eastern Queensland, described by Dr. Ramsay¹ as Platycercus pennantii var nigrescens.

¹ Ramsay—Tab. List Austr. Bds., 1883, p. 34.

Several specimens collected by Mr. Robt. Grant in open forest lands, near Lake Eicham, are in the normal plumage; others he procured in dense brush at Boar Pocket, only four miles away, exhibit traces less or more of melanism from a few scattered black feathers among the crimson ones on the back, to others having most of the feathers on the head, back, cheeks, and breast black. Traces of melanism I have also seen pervading the quills of young Cacatua galerita. There is an adult male of this species in the collection obtained by Mr. Robt. Grant at Fernmount, on the Bellinger River, New South Wales, with a faint blackish wash on the quills and outer series of greater wing-coverts, the shafts, too, of some of the quills being brownish-black.

Erythrism in the Australian Psittaci in the Australian Museum collection is represented by a single abnormally plumaged specimen of Platycercus eximius, Shaw (the so-called Platycercus ignitus, Leadbeater), that was found dead in Victoria Park, Newtown, near the University of Sydney. The lengthened upper mandible, the much worn quills, and tail-feathers bear evidence that it was an escaped cage-bird. It has the upper and under parts red, feathers on the upper portion of the back and scapulars black with narrow reddish margins; lesser series of the upper wing-coverts black; quills and tail feathers worn, abraded, imperfect, and having a washed out appearance; cheeks white; vent and under tail-coverts white, the latter having a faint reddish subterminal cross-bar.

Partial albinism in the Australian *Psittaci* is rare, and is generally confined to the quills and tail-feathers, although there are specimens of *Psephotus hæmatonotus* in the collection with the upper parts white washed with yellow, and the under parts white. I have never seen a pure albino of any species of Australian *Psittaci*.

Hybrids or abnormally plumaged specimens are not uncommon, of which Platycercus mastersianus, Ramsay, the type of which I have before me, is an instance. In the collection are also specimens of Platycercus elegans \times P. eximius, and an adult male and female of Platycercus barnardi \times P. flaveolus. The latter specimens were presented by Dr. A. M. Morgan, of Adelaide, who wrote me:—"I am sending you a male and a female, hybrids of Platycercus barnardi and P. flaveolus, shot near Wirrabara, one hundred and fifty miles north of Adelaide. The female was mated with a male of P. flaveolus, and the eggs contained embryos." There are numerous instances of abnormally plumaged individuals. Among the latter is a specimen of Neophema bourkei with some of the

quills, the greater wing-coverts and lateral tail-feathers white. M. Octave Le Bon informed me that he netted eight living examples of Neophema bourker at a soak near Melville on the Murchison Gold-field, Western Australia. I believe this species has not been previously recorded from Western Australia.