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Authors: Hubers, Jos, Schnitker, Heinz, and van Grouw, Hein

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Notes on a recently described subspecies, and the poorly known nominate subspecies of Rüppell's Parrot, *Poicephalus rueppellii mariettae* and *P. r. rueppellii*

by Jos Hubers, Heinz Schnitker & Hein van Grouw

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SUMMARY.—Rüppell's Parrot *Poicephalus rueppellii* was until recently considered to be a monotypic species. Birds from parts of north-western and west-central Angola, however, differ significantly in colour and size from the better-known populations across the rest of their range, which fact was overlooked until very recently. Because the name *rueppellii* was originally applied to the less-known Angolan population, it was the commoner southern population that lacked a taxonomic identity. The latter was described as *Poicephalus rueppellii mariettae* Hubers & Schnitker, 2022.

Rüppell's Parrot *Poicephalus rueppellii* (G. R. Gray, 1849) is a medium-sized dusky-brown parrot with the carpal joint, leading edge of the wing and underwing-coverts bright yellow. Remarkably, adult females are more colourful than adult males (see Appendix) as they also have a blue rump and lower belly. The species occurs in south-west Angola, north as far as Luanda (e.g., Bannerman 1912, eBird 2021) to north and central Namibia as far south as Sesriem (eBird 2021). Within this range the species is widely distributed in Namibia, extending into south-west Angola in Namibe, but there are only a few isolated populations elsewhere in Angola, mainly around the towns of Benguela and Luanda (Fig. 1). In southern Angola and Namibia the species is well known, whereas knowledge of the north-west and west-central Angolan populations is scarce and there are very few specimens in collections (see below).

The species has long been considered monotypic. Many sources (e.g., Collar 1997, Dickinson & Remsen 2013) do not clearly mention the populations in north-western and west-central Angola. Based on specimens in the Natural History Museum, Tring (NHMUK) we have found that there are two distinctive morphotypes that differ significantly in colour and size. Fry *et al.*

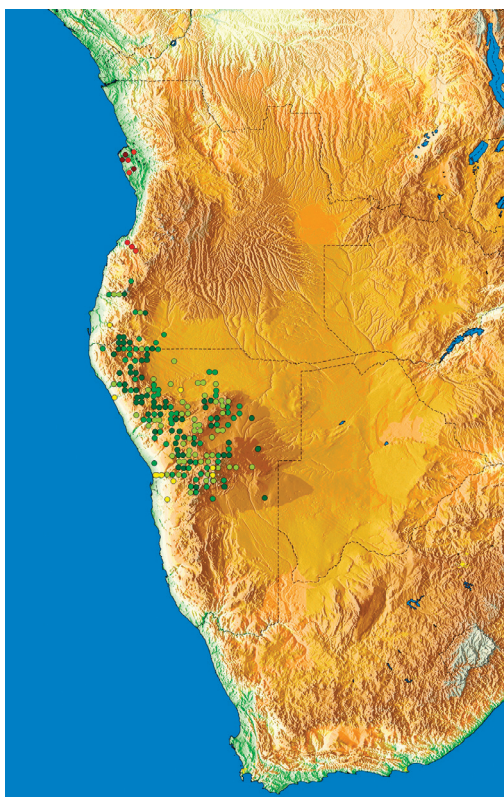


Figure 1. Distribution map of Rüppell's Parrot *Poicephalus rueppellii* based on eBird (<https://ebird.org/species/ruepar1?siteLanguage=de>). *P. r. rueppellii* (red dots) occurs only in north-west and west-central Angola around Luanda and Benguela, whereas *P. r. mariettae* (green dots) is widespread in Namibia and south-west Angola (© Thomas Arndt)



Figure 2. Differences in the blue coloration of females of the two subspecies of Rüppell's Parrot *Poicephalus rueppellii*. Left-hand bird in both A and B, *P. r. rueppellii* from northern Angola (NHMUK 1890.4.1.21, died 7 June 1882 at London Zoo, see also Fig. 7) and right *P. r. mariettae* from Namibia (NHMUK 1852.5.1.16, collected by C. J. Andersson in 1850 in Namibia, see Fig. 6) (Jonathan Jackson, © Natural History Museum, London)

(1988) already noted that birds in Angola are smaller but did not mention the difference in colour.

We found that specimens from Angola (except the south-west) are generally smaller (wing length in adults, $n = 5$: 132–140 mm) with on average darker overall plumage, and the blue rump and lower belly in females is significantly paler (turquoise-blue) compared to birds from Namibia and south-west Angola (Fig. 2). These latter are generally larger (wing length in adults, $n = 9$: 142–155 mm) with on average paler-coloured plumage, but the blue in females is significantly darker, more ultramarine. Photographs of birds in the wild confirm the differences in colour (Figs. 3–4). We also found five other specimens from north-west and west-central Angola with the same characteristics—smaller, generally darker and more turquoise-blue—in other institutions: three in the Naturalis Biodiversity Center, Leiden (RMNH.AVES.209654, see Fig. 5, and ZMA.AVES.944 and ZMA.AVES.945, the last two formerly held at the Zoölogisch Museum Amsterdam), one in the Senckenberg Museum Frankfurt (SMF 26.604) and one in the Instituto de Investigação Científica de Angola, Luanda (IICA 4301).

In the original description, Gray (1849) noted that the holotype came from the 'river Nunez'. Although this wording does not appear on the specimen's label, it has been taken by many authors to be the type locality for *P. rueppellii*. This river, however, is in present-day Republic of Guinea and therefore is well north of the species' range in Angola and Namibia. Peters (1937) realised the problem and altered the type locality to 'Damaraland'. Later, MacDonald (1957) restricted it to the 'Swakop River, Damaraland, Namibia', thereby linking (inadvertently) the name *rueppellii* to southern populations of larger and paler



Figure 3. Rüppell's Parrot *Poicephalus r. rueppellii* from north-west and west-central Angola; note the turquoise-blue plumage in females. (A) adult female, near Luanda, 16 September 2019 (© David & Sara Elizalde); (B) adult female, Mirador la Lua, Luanda province, 24 August 2012 (© Tommy P. Pedersen)

birds. However, Gray's holotype of *P. rueppellii*, a male held at NHMUK, clearly belongs to the northern morphotype. It is relatively small (wing length 135 mm) and dark in overall colour. Furthermore, its label is inscribed 'West-Africa', which term was then applied to an even wider area than today including present-day Angola, and therefore, unlike the original



Figure 4. Female of the recently described *Poicephalus rueppellii mariettae*, Namibia, 4 March 2018; this taxon, with dark ultramarine-blue plumage in females, is better known and more widespread than the nominate subspecies (© Charles James Sharp)



Figure 5. Specimen of nominate Rüppell's Parrot *Poicephalus rueppellii* from north Angola, in the Naturalis Biodiversity Center, RMNH.AVES.209654, which is smaller and overall darker but has the blue rump and belly paler than birds from south-west Angola and Namibia (© Naturalis Biodiversity Center, Leiden)

description, does not mention 'river Nunez' as its provenance. Consequently, the epithet *rueppellii* must be assigned to the smaller, darker northern taxon, which as far as is known occurs only around the towns of Benguela and Luanda in Angola. As a result, we propose to restrict the type locality to 'Luanda', after the shared locality of the only two specimens at NHMUK with precise data in this respect (NHMUK 1911.12.18.146, St. Paul de Loanda,



Figure 6. Type material of *Poicephalus rueppellii mariettae*, from left to right (in both A and B): holotype, adult female, NHMUK 1889.1.20.647; paratypes, adult male, NHMUK 1878.12.31.502, and juvenile, NHMUK 1878.12.31.431, all from Otjimbingwe, Damaraland, Namibia (Jonathan Jackson, © Natural History Museum, London)

and NHMUK 1911.12.18.147; Bemfica, Morro de Cruz, near Luanda; see also Bannerman 1912: 250).

Because the larger paler form common across the rest of the species' range lacked an available name, Hubers & Schnitker (2022) described the Namibian and south-west Angolan populations as *Poicephalus rueppellii mariettae*. They designated an adult female, NHMUK 1889.1.20.647, from Otjimbingwe, Damaraland, Namibia, as its holotype, with two paratypes, NHMUK 1878.12.31.502 (adult male) and NHMUK 1878.12.31.431 (juvenile, see Fig. 6) from the same locality. The name *mariettae* honours Jos Hubers' wife, Mariëtte.

The original description was published in German (Hubers & Schnitker 2022) with photos of specimens of both subspecies held in Tring, of females of both subspecies in the wild as well as of *mariettae* in captivity, and a map showing the two subspecies' known distributions including data from eBird (2021).

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References

- Andersson, C. J. 1872. *Notes on the birds of Damara Land and the adjacent countries of South-West Africa. Arranged and edited by J. H. Gurney*. John van Voorst, London.
- Bannerman, D. A. 1912. On a collection of birds made by Mr. Willoughby P. Lowe on the west coast of Africa and outlying islands; with field-notes by the collector. *Ibis* (9)6: 219–268.
- du Bocage, J. V. 1881. *Ornithologie d'Angola, ouvrage publié sous les auspices du ministère de la marine et des colonies*. Imprimerie Nationale, Lisbon.
- Collar, N. J. 1997. Family Psittacidae (parrots). Pp. 280–477 in del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) *Handbook of the birds of the world*, vol. 4. Lynx Edicions, Barcelona.

- Dickinson, E. C. & Remsen, J. V. (eds.) 2013. *The Howard and Moore complete checklist of the birds of the world*, vol. 1. Fourth edn. Aves Press, Eastbourne.
- eBird. 2021. eBird: an online database of bird distribution and abundance. Cornell Lab of Ornithology, Ithaca, NY. <http://www.ebird.org> (accessed 22 October 2021).
- Finsch, O. 1868. *Die Papageien, monographisch bearbeitet*, vol. 2. E. J. Brill, Leiden.
- Fry, C. H., Keith, S. & Urban, E. K. (eds.) 1988. *The birds of Africa*, vol. 3. Academic Press, London.
- Gray, G. R. 1849. Description of a new species of parrot. *Proc. Zool. Soc. Lond.* 1848: 125.
- Hartlaub, G. 1857. *System der Ornithologie Westafrika's*. C. Schünemann, Bremen.
- Hubers, J. & Schnitker, H. 2022. Der Mariette-Papagei, eine neue Unterart des Rüppell-Papageis. *Papageien* 35: 71–77.
- McDonald, J. D. 1957. *Contribution to the ornithology of Western South Africa: results of the British Museum (Natural History) South West Africa Expedition, 1949–50*. Brit Mus. (Nat. Hist.), London.
- Peters, J. L. 1937. *Check-list of birds of the world*, vol. 3. Mus. Comp. Zool., Cambridge, MA.
- Salvin, O. 1882. Additions to the Society's menagerie. *Proc. Zool. Soc. Lond.* 1882: 421.
- Schlegel, H. 1864. Psittaci. *Mus. Hist. Nat. Pays Bas, Rev. Méth. Crit. Coll. livr.* 3, 26: 1–166.
- Sclater, P. L. 1882. Note on Rüppell's Parrot. *Proc. Zool. Soc. Lond.* 1882: 577–578.
- Strickland, H. E. & Sclater, P. L. 1853. List of a collection of birds procured by Mr. C. T. Andersson in the Damara country in South Western Africa. *Contrib. Orn. for 1852*: 141–160.

Addresses: Jos Hubers, 6685 AC Haalderen, Klein Baal 33, the Netherlands, e-mail: jhubers56@gmail.com. Heinz Schnitker, 49832 Thuine, Klosterstraße 14, Germany, e-mail: heinzschnitker@hotmail.com. Hein van Grouw, Bird Group, Natural History Museum, Akeman Street, Tring, Herts. HP23 6AP, UK, e-mail: h.van-grouw@nhm.ac.uk

Appendix: male or female?

In addition to having been, until recently, considered monotypic, colour differences between the sexes of Rüppell's Parrot *Poicephalus rueppellii* were a source of confusion for some time after the species' description. Until 1882 the bird described and pictured by Gray (1849, see Fig. 7) was assumed to be female (Sclater 1882). Strickland & Sclater (1853) had seen specimens from 'Damaraland' (Namibia) collected by Andersson (Fig. 8) and it was assumed that the more colourful bird, with a blue rump and belly, was male and the uniform individuals were female. Some authors (e.g., Hartlaub 1857) agreed but others (e.g., Schlegel 1864, Finsch 1868, du Bocage 1881) thought both sexes had blue feathers. Andersson himself (1872) had noted that only *some* females had blue feathers.

In April 1882 the Zoological Society of London received four live Rüppell's Parrots from 'West Africa', two with and two without blue feathering (Salvin 1882). These died c.2 months later and during dissection it was noticed that the blue-feathered birds were, in fact, female and the others were male (Sclater 1882). At least three of the specimens were initially retained in the Society's collection but transferred to the then British Museum (Natural History) in 1891 (Fig. 9). Sclater (1882), the Society's secretary at the time, noted that 'exactly contrary to the usual state of the case, it is the female in *Poicephalus rueppellii* (Pl. XLII [Fig. 10]) that acquires this additional ornamental colour, and *not* the male.'

So, it was Sclater (1882) who was first to notice that female Rüppell's Parrot was more colourful than the male. What Sclater did not see was the difference in size and colour between the parrots received in 1882 and those collected



Figure 7. Illustration (pl. V) in Gray's (1848) original description of Rüppell's Parrot *Poicephalus rueppellii*, based on the holotype (NHMUK 1855.12.19.362) from northern Angola (© Jonathan Jackson, Natural History Museum, London)



Figure 8. Bird specimens collected by C. J. Andersson in 1850 in Damaraland (Namibia) were sold by the dealer A. D Bartlett of London and some were acquired by the British Museum, including this male (NHMUK 1852.5.1.15), on left in A and B, and female (NHMUK 1852.5.1.16) Rüppell's Parrot *Poicephalus rueppellii mariettae*. These specimens were seen by Strickland & Sclater (1852) and, because Andersson had not sexed the birds during preparation, due to the differences in colour it was assumed that the more colourful individual was the male (Jonathan Jackson, © Natural History Museum, London)



Figure 9. Three of the four specimens received alive at London Zoo in April 1882 and which died in June 1882, from left to right: male, NHMUK 1890.4.1.19; male, NHMUK 1890.4.1.20; female, NHMUK 1890.4.1.21 (Jonathan Jackson, © Natural History Museum, London)



Figure 10. Pl. XLII in Sclater (1882): the bird illustrated was one of two females received by London Zoo in April 1882 from northern Angola, and has the blue rump characteristic of female Rüppell's Parrot *Poicephalus rueppellii* but which is paler in colour than that of Namibian parrots, a fact Sclater failed to notice (Jonathan Jackson, © Natural History Museum, London)

by Andersson in Namibia that he had examined years earlier. The blue in the latter was much darker than that of the birds that died in the Society's Menagerie (= London Zoo) and were collected in 'West Africa' (= Angola, see Figs. 3 and 9). These were of the same morphotype as Gray's (1849) holotype of *rueppellii* but the differences from the commoner and more widespread Namibian population went unnoticed for 137 years.