

Rallidae: lump *Amauornis magnirostris* (Talaud Bush-hen) with *A. olivacea* (Plain Bush-hen)

Amauornis is a genus within the Rallidae waterbird family, currently recognized as comprising five species (AviList v2025).

Plain Bush-hen: <https://birdsoftheworld.org/bow/species/plabuh1/cur/introduction>

Talaud Bush-hen: <https://birdsoftheworld.org/bow/species/talbuch1/cur/introduction>

Talaud Bush-hen *A. magnirostris* is endemic to Karakelong island, part of the Talaud Islands, Indonesia. Talaud Islands are situated between Indonesia and Philippines. It is sympatric with Pale-vented Bush-hen *A. moluccana*, which is a widespread species in Australasia.

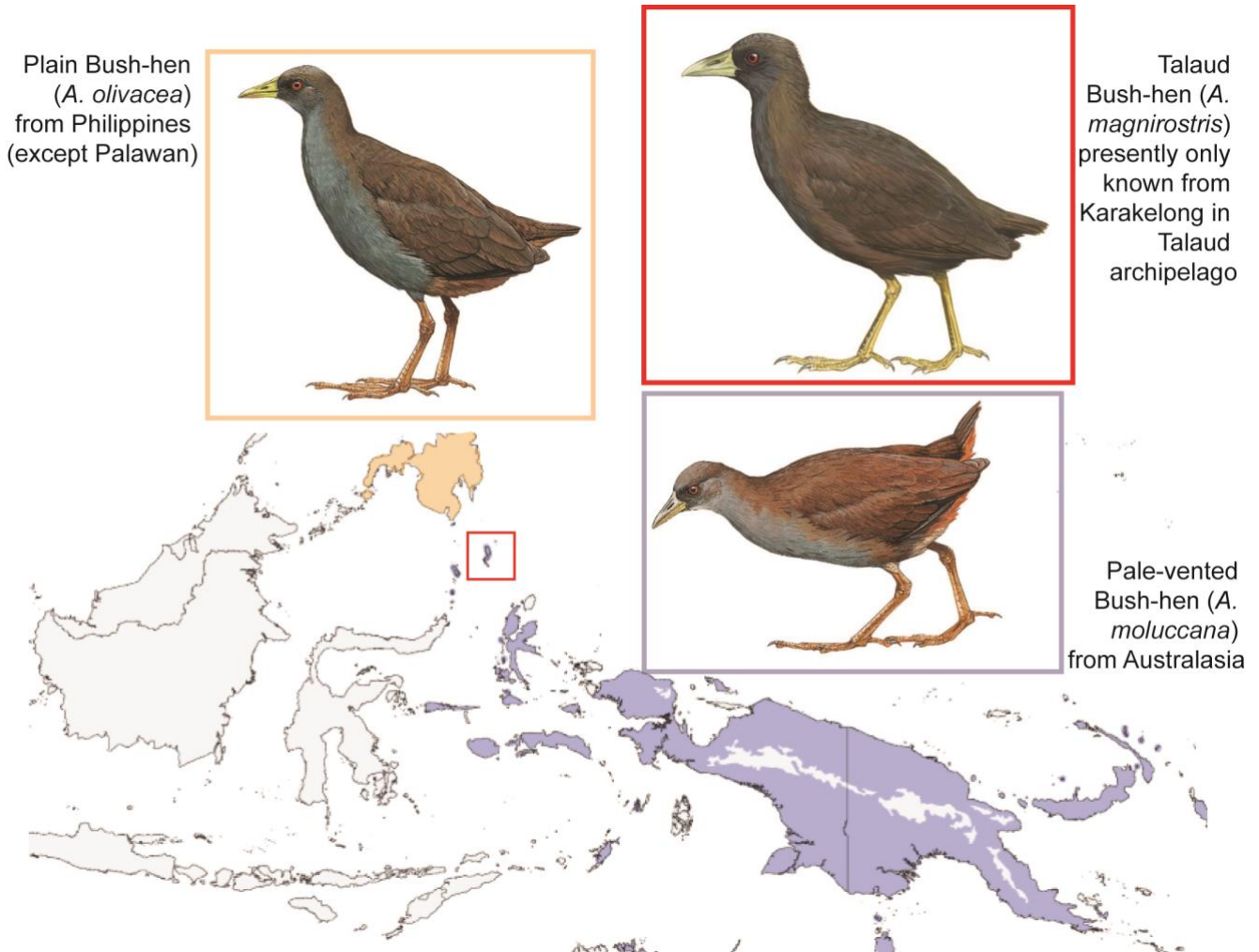


Fig 1: Range map showing distribution of Talaud Bush-hen *Amauornis magnirostris* (red square) where it overlaps with Pale-vented Bush-hen *A. moluccana*, and approaches the southern end of the range of the Plain Bush-hen *A. olivacea*. Note that the full ranges of Pale-vented and Plain Bush-hen are not depicted, and that Talaud is the northern limit of the Pale-vented Bush-hen's range. Illustrations sourced from Birds of the World.

Plain Bush-hen *A. olivacea* is currently regarded as a Philippine endemic: it was once lumped with *A. moluccana* (Peters, 1934), but has been subsequently recognized as distinct (McAllan & Bruce, 1988; Lambert, 1998).

This proposal looks at the taxonomy of Talaud Bush-hen *A. magnirostris*, and proposes treating it as a subspecies of Plain Bush-hen *A. olivacea*, following Eaton et al (2021), based on vocal similarities and plumage characteristics (Fig. 2).

Plain Bush-hen *Amauornis olivacea*

L 30 cm. Phil, Talaud. 2 ssp, 1 in region: *magnirostris* (Talaud), which is usually considered monotypic species 'Talaud Bush-hen' but is virtually identical in voice and very similar in plumage to slightly smaller nominate form from Phil. Uncommon in damp, dense understorey in primary and degraded forest, particularly swampy areas with rattan. In region, less common in marshy, rank vegetation at forest edge. Singly or pairs, very shy. **ID Ad** very dark with striking robust, pale-green bill; upperparts dark-brown; underparts dark blue-grey with olive legs. **Imm** undescribed. **Voc** Series of 4–25 loud grating, barking "gra-gra-gra...", ~2 n/s. **SS** Smaller Pale-vented Bush-hen is extremely similar. Best told by voice, shorter bill in which nostril is almost halfway towards tip (versus massive bill with nostril only a third towards tip), darker and more blackish eye (versus piercing red eye) and – with good views – rufous (not blackish) vent. Pale-vented Bush-hen inhabits forest edge and marshes (rarely entering forest interior).

Fig 2: Species account of Plain Bush-hen from Eaton et al. (2021), which recommends recognizing Talaud Bush-hen as a subspecies of the former

1) Morphology and Plumage

Excerpt from original description of [Amauornis magnirostris \(Talaud Bush-hen\)](#) (Lambert 1998):

'Compared with *A. olivaceus*, which is most similar in size, measurements of the tarsus and foot suggest that, although of similar length, lying at the upper range limit of the latter, the leg of *A. magnirostris* is stouter and the feet heavier. *A. isabellinus* [Isabelline Bush-hen from Sulawesi] is similar in size to *A. magnirostris* but is smaller-headed with a smaller bill, and has more slender, longer legs. The culmen is concave or straight, not arched as in *magnirostris*'.

The main deciding factor for the recognition of *A. magnirostris* as a species, based on the [type description](#) (see Appendix), seemed to its large size. Indeed, the measurements for *magnirostris* are much larger than *olivacea* in all aspects with no overlap, except on tarsus length where it overlaps with the upper bound (Table 1). However, this could be a case of island gigantism, where this isolated island population is much larger than the mainland counterpart. Lambert (1998) was also only able to sample a single *A. magnirostris* individual, therefore the intra-population variation in size of this taxon is unknown.

TABLE 1
Biometrics of five species of *Amauornis*. Comparison of wing measurements are not included since the wing of the only specimen of *A. magnirostris* was frayed and missing feathers (but see Table 2). (Measurements in mm)

Taxon		Bill length ¹	Nares to tip	Depth at nares	Tarsus length	Proximal tarsus width ²
<i>Amauornis olivaceus</i> (Philippines)	Mean (sample size)	37.64 (15)	16.71 (14)	9.98 (12)	59.57 (15)	7.87 (15)
	Range	32.2–39.4	15.2–18.6	8.6–10.9	51.0–63.9	6.9–8.3
	Standard deviation (SD)	1.96	1.16	0.7	3.2	0.4
<i>A. magnirostris</i> (Karakelong)	(type specimen)	45	23.2	12.6	62	8.7
<i>A. moluccanus</i> (Australia to Moluccas and Sangihe)	Mean (sample size)	32.59 (12)	16.04 (11)	9.33 (9)	49.33 (13)	6.58 (12)
	Range	29.4–35.2	14.7–17.5	8.6–10.2	46.1–54.4	6.3–6.9
	SD	2.08	1.1	0.52	2.74	0.22
<i>A. isabellinus</i> (Sulawesi)	Mean (sample size)	35.72 (5)	17.0 (5)	9.32 (4)	58.7 (5)	8.0 (5)
	Range	32.9–38	16.9–18.3	8.4–10.0	52.3–64.7	7.5–8.9
	SD	2.06	1.1	0.81	4.4	0.57
<i>A. akool</i> (SE Asia)	Mean (sample size)	33.83 (10)	17.77 (10)	8.47 (9)	48.46 (10)	6.16 (10)
	Range	31.8–36.4	16–19.5	8.1–9.3	45–50.8	6.0–6.4
	SD	1.35	0.99	0.38	1.65	0.17

¹Gape to tip.
²Proximal tarsus width=width of tarsus at widest point.

Table 1: bill and tarsus measurements of Talaud Bush-hen *A. magnirostris* (n=1) compared with that of sympatric and/or neighboring *Amauornis* taxa (Lambert 1998) (measurements of White-breasted waterhen *A. phoenicurus* are not included). Note that '*A. akool*' refers to Brown Crake *Zapornia akool*.

Lambert (1998) also states: "Although the depth of the bill of *A. magnirostris* falls into the range for that of *A. olivaceus* when measured at its base, the depth of the former is 15.6% larger at the nares than that for the largest measurement for any of the specimens of *A. olivaceus*. This clearly demonstrates the difference in shape of the bill,

which is strongly arched in the former species, and broad along a considerable length—that of *A. olivaceus* is shorter and more tapered.”

An important diagnostic feature not discussed in Lambert (1998) is eye colour, which is blood red in both *magnirostris* (Fig. 3, 4) and *olivacea* (Fig. 5) (versus dark brown in *moluccana* [Fig. 6]). Note that the Birds of the World illustration (Fig. 1) incorrectly depicts Pale-vented Bush-hen’s eye colour as red, but the descriptive text (“iris dark brown”) and photos all clearly indicate that the iris is not red.



Fig 3: Talaud Bush-hen *Amauornis magnirostris*, showing blood red iris, note that darkness around nostril is likely age/sex related (see difference with this individual and that pictured in Fig. 4).



Fig 4: Talaud Bush-hen *Amauornis magnirostris*, note plumage pattern, as well as similar bill shape and colour to Plain Bush-hen *Amauornis olivacea* (Fig. 5).



Fig 5: Plain Bush-hen *Amaurornis olivacea*, note blood red iris, and similar bill shape and colouration to Talaud Bush-hen in Fig. 4



Fig 6: Pale-vented Bush-hen *Amaurornis moluccana*, which appears different from both Talaud and Plain Bush-hen (see eye colour and bill)

As can be seen in Fig. 4 and 5, both bill colouration and shape are quite similar between Talaud and Plain Bush-hen – yellow-green, with some darkening around the nostril on the upper mandible (although the bill length is clearly longer in the former, based on measurements of a single individual).

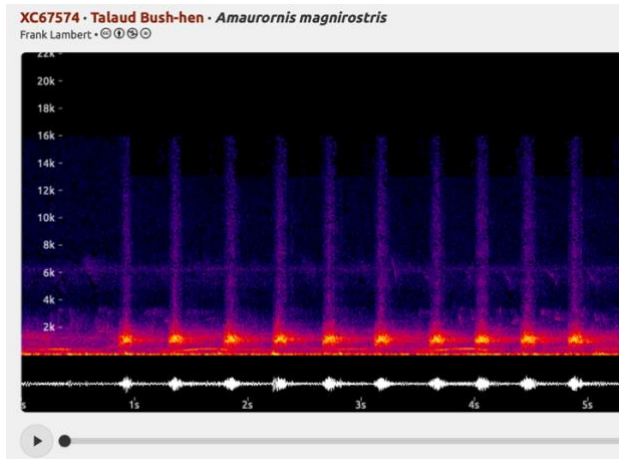
2) Bioacoustics

The only call conclusively described and known to be produced by a Talaud Bush-hen *A. magnirostris* is a scratchy loud frog-like call. In contrast, Plain Bush-hen *A. olivacea* is described to produce a 'raspy growling "kaawww keerrr"' as well as the scratchy frog-like call.

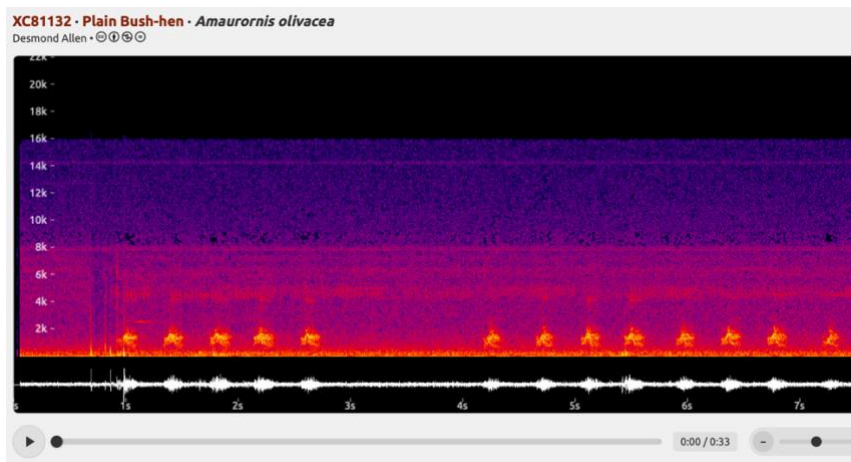
However, Lambert (1998) was convinced that the frog-like call was not present in *olivacea*, which does not hold true.

magnirostris vs *olivacea*. Calls are linked below, and spectrograms depicted:

Talaud Bush-hen: <https://xeno-canto.org/67574>



Plain Bush-hen: <https://xeno-canto.org/81132>



Unfortunately, vocalisations between *magnirostris* and *olivacea* were not directly compared in the type description.

However, note that their possible secondary contact call also seems extremely similar: *magnirostris* vs *olivacea*

3) Genomics

Thus far, no genetic work has been done on this complex of *Amauornis*.

4) Habitat

Plain Bush-hen *Amauornis olivacea* is found in 'waterside grass clumps, flooded scrub and swampy grassland; nests in swampy conditions but also ranges through neighbouring grassland and forest edge.' (Taylor 2020), whereas Talaud Bush-hen *A. magnirostris* is found in 'Forest, including primary forest and secondary growth, and remnant forest patches; also, at lower density, in rank vegetation, scrub and overgrown plantations up to 3 km from

forest edge. To c. 300 m. Tolerates some habitat modification, but precise habitat requirements not determined. Sympatric with *A. moluccana*.' (Fjeldså and Sharpe 2020)

Although *A. magnirostris* is not found in the same degraded habitat as *A. olivacea*, and *A. olivacea* is generally not found in primary forest (RO Hutchinson in litt.), this could well be to do with competition and habitat partitioning with Pale-vented Bush-hen *A. moluccana* on Karakelong island. *A. moluccana* is found in more degraded habitats, such as waterside grass clumps, flooded scrub and swampy grassland, as well as suburban gardens, where *A. magnirostris* is absent. Given the presence of a second *Amauornis* taxon on the Karakelong, we believe that *A. magnirostris* has shifted its requirements to occupy more forested areas whereas *A. moluccana* occupies more edge habitats and degraded areas.

5) Biogeography

The Talaud archipelago forms deep sea islands and therefore would have been isolated from other land masses during the Pleistocene glaciations cycles. However interestingly, Talaud Islands share a number of other species with the Philippines that would have otherwise been considered Philippine endemics. Some of these species are found primarily on the larger Philippine islands:

Philippine Pitta *Pitta erythrogaster* (with Talaud endemic subspecies *inspeculata*)

Rufous Paradise-flycatcher *Terpsiphone cinnamomea* (with Talaud endemic subspecies *talautensis*)

Everett's White-eye *Zosterops everetti* (with Talaud endemic subspecies *babelo*)

Chocolate Boobook *Ninox randi*

Conclusion

The Tropical Asian RAG unanimously supports the taxonomic rearrangement of Talaud Bush-hen *Amauornis magnirostris* to treat it as a subspecies of Plain Bush-hen *A. olivacea*, following Eaton et al (2021). This recommendation is based on bioacoustic similarities and morphological characteristics (eye colour, plumage, bill colour and shape): we acknowledge that these taxa differ in biometrics based on a limited sample size. We also note that despite being a deep sea island, the Talaud archipelago shares many species with the Philippines so our proposed treatment is not wholly unexpected. The suggestion to lump these taxa has also been echoed by Collar et al. (2021) (Fig. 8).

Lumps

Amauornis magnirostris* = *A. olivacea magnirostris

Talaud Bush-hen *A. magnirostris* was described as a species new to science by Lambert (1998) and has been afforded species rank without question in the literature ever since. Halting such precedent, Eaton *et al.* (2021) treat it as a subspecies of Plain Bush-hen *A. olivacea* (otherwise endemic to the Philippines) on account of 'virtually identical' vocalisations and its being 'very similar in plumage to slightly smaller [*olivacea*]'.

Fig 8: Collar et al. (2021) also recommends recognizing *A. magnirostris* as a subspecies under Plain Bush-hen *A. olivacea*

References

Collar, N.J., Berryman, A.J. and Donald, P.F., 2022. Taxonomic changes proposed for Asian birds in 2021. *BirdingASIA* 38: 37-49.

Eaton, J.A., Van Balen, B., Brickle, N.W. and Rheindt, F.E., 2021. Birds of the Indonesian Archipelago. Greater Sundas and Wallacea. Second edition. Lynx Edicions, Barcelona, Spain.

[Fjeldså, J. and C. J. Sharpe \(2020\). Talaud Bush-hen \(*Amauornis magnirostris*\), version 1.0. In *Birds of the World* \(J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana, Editors\). Cornell Lab of Ornithology, Ithaca, NY, USA.](#)

Lambert, F.R. 1998. A new species of *Amauornis* from the Talaud Islands, Indonesia, and a review of taxonomy of bush hens occurring from the Philippines to Australasia. *Bulletin of the British Ornithologists' Club* 118: 67-82.

Appendix

Original description of Talaud Bush-hen as a species in Lambert (1998):

TALAUD BUSH HEN *Amaurornis magnirostris* sp. nov.

Holotype

Museum Zoologicum Bogoriense, Bogor, Indonesia, specimen number MZB 30.272: collected by Frank R. Lambert on 15 August 1996; unsexed. The bird was purchased in Beo, Karakelong Island, Talaud, from a hunter who had trapped it near Rainis (4°14'N 126°51'E) at an altitude of less than 100 m a.s.l. (Plate 2).

Diagnosis

Most similar to *Amaurornis olivaceus* but also superficially similar to *A. moluccanus*, which is sympatric with *A. magnirostris* on Talaud. *Amaurornis magnirostris* differs from both these species in being darker below with no contrasting paler-coloured undertail-coverts and in having a considerably bigger skull and longer, broader bill (Table 1) with a distinctly arched culmen.

The skull is 8.0% wider (25.5 mm in *magnirostris*, measured at the widest point) than the largest intact skull of nine *A. olivaceus* (20.3–23.7 mm) in BMNH. Bill of *A. olivaceus* (measured from the gape to the tip) ranged from 32.2–39.4 mm in the series of 15 birds with intact bills in BMNH. In comparison, the bill length of the holotype of *A. moluccanus* is 45 mm, or *c.* 14% longer than the longest bill of *A. olivaceus*. The longest-billed specimens of *A. moluccanus* in BMNH have bill lengths of 35.2 mm.

It should be noted that Ripley's (1977) measurement of *A. olivaceus* and *A. moluccanus* (Table 2), based on an unknown sample size, differ in range from those provided in Table 1. Those of Parkes (1971), however, are in general agreement with those made by myself and presented in Table 1.

Although not all vocalisations are well documented, those of *A. magnirostris* that were recorded (the "piping" calls—see under Vocalisations) appear to be significantly different from those of *A. moluccanus*, which are well documented in Australia (see Figure 2).

Finally, *A. magnirostris* seems to be an adaptable forest bird, penetrating tall primary forest far from secondary vegetation, rather than a bird of disturbed habitats.

Although the depth of the bill of *A. magnirostris* falls into the range for that of *A. olivaceus* when measured at its base, the depth of the former is 15.6% larger at the nares than that for the largest measurement for any of the specimens of *A. olivaceus*. This clearly demonstrates the difference in shape of the bill, which is strongly arched in the former species, and broad along a considerable length—that of *A. olivaceus* is shorter and more tapered. The large head and bill size of *A. magnirostris* can also be discerned by comparing measurements with *A. isabellinus*, which has usually been considered to be a large species.

Compared with *A. olivaceus*, which is most similar in size, measurements of the tarsus and foot suggest that, although of similar length, lying at the upper range limit of the latter, the leg of *A. magnirostris* is stouter and the feet heavier.

A. isabellinus is similar in size to *A. magnirostris* but is smaller-headed with a smaller bill, and has more slender, longer legs. The culmen is concave or straight, not arched as in *A. magnirostris*.

Additional measurements documented in Lambert (1998) of Plain Bush-hen and Pale-vented Bush-hen. These measurements were taken by other sources and therefore may not be directly comparable to those in Fig. 1

TABLE 2
Published biometrics of *A. olivaceus* and *A. moluccanus*. Values in parenthesis are means. Note that these measurements may not all be directly comparable because of differences in methods of measurement and because they were made by numerous different people. (Measurements in mm; weights in g; M=male, F=female)

Taxon/author	Sample	Locality data	Bill Length M	Bill Length F	Tarsus M	Tarsus F	Wing M	Wing F	Tail M	Tail F	Weight M	Weight F
<i>A. olivaceus</i>		Philippines										
Ripley 1977	Not given	Philippines	36-41#	31-38#	65-69	57	166-178	148-166	57-63	53		
Parkes 1971	4F, 1M	Siquijor	39#	35.5-38 (37)#			171	160-166 (164.5)				
Parkes 1971	10F, 10M	Rest Philippines	36-39 (37.25)#	31-35 (34.3)#			166-178 (168.4)	148-162 (155.2)				
Rand & Rabor 1960	1F, 2M										292.5-312.5	250
<i>A. m. moluccanus</i>		Sulawesi, Moluccas, New Guinea										
Ripley 1977			27-35 (unsexed)#		40-46 (unsexed)				50-59 (unsexed)		182, 205	200, 205
Mayr 1949	2M						138, 157					
Mayr 1938	5F			29-31 (30.4)		47-51 (49.2)						
Mayr 1938	3M, 6F		34-35 (34.3)		49-53 (50.7)		145-158 (153)	135-143 (139.2)				
Meyer & Wigglesworth 1898	3						145-147					
Meyer & Wigglesworth 1898	1M, 1F						146 141					
<i>A. m. nigrifrons</i>		Bismark Archipelago east to Solomon Islands										
Mayr 1949	20M, 20F		29-33	25-30	54-58	49-54	130-146 (139.2)	126-142				
Gilliard & Lecroy 1967	1M, 1F										179	177
<i>A. m. ultimus</i>		East Solomon Islands										
Mayr 1949	11M		28-32 (30.4)	25-30 (28.3)	50-55 (53)	47-52.5 (50.5)	124-134 (129.5)	121-132 (125.5)				
Mayr 1949	6M, 3F										189-248	135, 162, 192
<i>A. m. ruficrissus</i>		S and E New Guinea, Australia										
Marchant & Higgins 1993	12M, 6F	Australia	30-35 (31.5)	27.5-29.5 (28.9)		44.5-50 (48.3)	145-159 (152)	133-150 (143.8)		52-63 (58)		
Marchant & Higgins 1993	11M	Australia			49.5-55 (51.7)				61-71 (64.5)			
Marchant & Higgins 1993	14M	Australia									129-208 (177)	131-163
Marchant & Higgins 1993	9M, 3F (im)	Australia										175, 180
Ripley 1977	Not given		c35#	c28-30#	c56		142-158	129-142	56	56		

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