NOTE ON THE AUSTRALIAN CURLEW AND ITS CLOSELY ALLIED CONGENERS.

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A comparison of the Australian Curlew with its near Asiatic ally, and its more distantly related representative in Europe and Western Asia, may not be uninteresting to Members of this Society who study ornithology.

The Curlews of the old world, like other members of the Wader family (Charadriide), resemble one another in plumage, and hence we find that a few years ago Naturalists confused them not a little; we have the Indian and the Chinese Curlew spoken of as the European bird, and there seems to be some confusion about the European and South African species. Unlike the American Curlews, which have a distinguishing characteristic on the buff tinting of the under wing and axiliaries, the old world species differ chiefly in character of the markings of the breast and axiliaries and in the ground colour of the rump, and it is by referring to these parts that a correct diagnosis of the above species, on which I make this note, can be founded. A marked characteristic, however, of the Australian bird is its length of bill.

The European or common Curlew is:—Numenius Arquata (Linn), described as Scolopax Arquata, Linnæus, Syst. Nat.

Ed., 12, 1. p. 242 (1766).

The Eastern, or Asiatic Curlew is:—Numenius Lineatus (Cuvier), Reg. An., 2nd Ed., 1. p. 52 (1829).

The Australian Curlew is:—Numenius Cyanopus (Vieillot), 2nd Ed., du Nouv. Dict. d'Hist. Nat. Vol. viii., p. 306 (1817).

The latter is the Numenius Major of Schelgel from Japan, and the Numenius Australis of Gould from Australia, and likewise the Numenius Rufescens of Gould, in the proceedings of the Zoological Society, 1832, p. 286—which name appears to have been founded on a specimen in breeding plumage.

The following diagnostic table will tend to illustrate the characteristics above alluded to:—

Bill.	Feathers, with cen. White, more or less brown markings barred with brown; if striped withdark brown, to tip \$\pi\$ 50 to 65 broken into the form the markings are expanding into bars of bars. White, the feathers Along culmen, base expanding into bars on inches. almost absent they the longer tail-coverts.	Feathers, with nar- vow shaft lines of shaft-lines of brown, ground colour, never in the shape of lines. White, tail - coverts White, tail - coverts Along culmen, base in the shape of lines.	Numerius Feathers, with bold White, barred with Brown, like the back, Along culmen, base sharp stripes of dark brown, more clearly the markings in the to tip \$\phi\$ 68 to 80 brown, the white ground than in N. Arquata. Cyanopus. Brown, like the back, Along culmen, base form of interrupted inches. bars. Bars.
RUMP.	White, the festriped withdarklexpanding into be the longer tail-co	White, tail -c with dark brown lines.	Brown, like the the the markings if form of interbars.
AXILIARIES.	White, more or less barred with brown; if the markings are almost absent they still take the form of bars near the tip.	White, with narrow shaft-lines of brown, never in the shape of bars.	White, barred with brown, more clearly than in N. Arquata.
Breast.	Feathers, with central brown markings barred with brown; if striped with dark brown, to tip broken into the form the markings are expanding into bars of bars. White, the feathers Along trail striped with dark brown, to tip almost absent they the longer tail-coverts. Still take the form of bars near the tip.	Feathers, with nar- vow shaft lines of shaft-lines of brown, with the brown, ground colour, never in the shape of lines. Arquata.	Feathers, with bold sharp stripes of dark brown, the white ground colour tinged buff, deeper in summer plumage.
	Numenius Arquata.	Numenius Lineata.	Numenius Cyanopus,

As regards our Curlew, N. Cyanopus, on arriving in Tasmania in September some specimens have the buff tinge of the breeding season still remaining on the breast and flanks, and accompanying this is a rufescent hue on the longer upper tail coverts and central tail feathers. This species no doubt varies in size, length of wing and length of bill, as much as its congeners. But, unfortunately, I have not yet got together a series of specimens, and cannot give much information on the subject. A pair shot in Ralph's Bay, by my son, on the 14th September, measured as follows:—

♦ Length, 24.75 in.; wing, 12.25; expanse, 42.0; tarsus, 3.5; bill along culmen, 6.9. ♦ Length, 22.0 in.; wing, 11.1; tarsus, 3.4; bill along culmen 5.5. In both, the legs were bluish grey, with the toes darkish; iris, very deep brown; bill, dark brown; tip, blackish; base beneath, fleshy reddish.

Geographical Distribution.—Although the Australian Curlew is a migratory species, breeding in northern climates in summer and "wintering" here in our summer, many seem to remain throughout the year with us. This is a common feature in the economy of the Waders. I have found several species of well-known "northern breeders" remaining in Ceylon in considerable numbers in the cool season, but not to breed; and though our Curlew remains with us in the winter it is impropable that it breeds here.

It migrates north through the Malay Archipelago, being there met with on passage in Borneo, New Guinea, the Philippines and other islands; thence northward along the coast of China to Amoor Land, and up to Lake Baikal, in which region it is supposed to breed. In Japan, it has been met with as far north as Hakodadi. According to Buller it only occurs sparingly in New Zealand; but nevertheless seems to remain there in winter. New Zealand is probably its eastern limit; for farther east it is replaced by the oceanic species, N. femoralis, with curiously formed tibial feathers, and which occurs in the Marquesas Islands. Ramsay records our bird from all the Australian Colonies.

Following the principle advocated here, that the Asiatic Curlew, N. Lineata, is distinct from the European bird, we have the range of the former across the continent to China, down the peninsula of India to Ceylon, and likewise southwards from China to the Malay islands, where it has been procured in Java, Sumatra, and Borneo. The same form of bird is known to migrate down the east coast of Africa, and Layard records it as a resident in South Africa.

Its range would appear to be over-lapped, so to speak, by that of the Australian Curlew in Amoor Land and Japan, the present bird not being found north of the south-eastern part of Mongolia—where it breeds, quitting the southern portions of the continent in April for that purpose.

Lastly, the range of the European Curlew may be defined to extend throughout Europe, taking in the Orkney, Faroe, and Shetland Islands. It likewise occurs in Western Asia. It is found in the Azores and in North Africa, extending down the coast of that continent to Damara Land. It appears not to wander to the extreme south, for all the South African Curlews I examined in the British Museum when compiling my work were inseparable from the foregoing species as found in India, China, and Ceylon. It would therefore appear to take in the west coast, while the Asiatic or "Eastern" Curlew monopolises the east coast and the extreme south in its wanderings.