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a branch of the Scientific Society of Namibia
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Roberts Number	Species		Highest number of birds recorded at one time	Birds proven to breed	Residents possibly breed	Species ringed since 1984
	Common Name	Scientific Name				
716	Richard's Pipit	*Anthus novaeseelandiae*	1			
732	Fiscal Shrike	*Lanius collaris*	Common		x	
788	Dusky Sunbird	*Nectarinia fusca*	Common		x	
803	Cape Sparrow	*Passer melanurus*	Common	x		
810*	Spectacled Weaver	*Ploceus oculoris*				
814	Masked Weaver	*P. velatus*	Common	x		x
815	Lesser Masked Weaver	*P. intermedius*	Not Common	x		
816	Golden Weaver	*P. xanthops*	Not Common	x		x
846	Common Waxbill	*Estrilda astrild*	Common		x	

SEXING CHESTNUT WEAVERS Ploceus rubiginosus

Joris Komen

The State Museum of Namibia, P.O. Box 1203, Windhoek, Namibia

INTRODUCTION

The Chestnut Weaver Ploceus rubiginosus is considered to be uncommon and localised in southwestern Africa, with seasonally erratic fluctuations in numbers and poorly understood dispersal during periods of non-breeding (Braine & Braine 1971, Maclean 1985, Berry et al. 1987). When adults are in eclipse plumage, it is virtually impossible to determine the sex and age of individuals in the field. This problem is compounded by a dearth of published morphometric information (Maclean 1985, Komen in press). Many species of otherwise monomorphic birds show some degree of sexual size dimorphism and appropriate body measurements may be used to determine the sex of individuals. I have shown elsewhere that Chestnut Weavers can be accurately sexed, using relatively complicated discriminant analysis of body measurements (Komen in press). This method requires access to a calculator, an item which is rarely found in a ringer's box of tricks, sc it is useful to provide an alternative, simple and convenient, method of determining sex of Chestnut Weavers in the hand.

METHODS

Forty-six Chestnut Weavers were measured during ringing operations on Otjongoro Farm near Omaruru in 1985 (20° 53′ S, 15° 38′ E) and near Tsumkwe, Bushmanland, Namibia (19° 37′ S, 20° 27′ E) in 1986. All other specimens were study skins (n = 188) and anatomical specimens (n = 26) from the collection of the State Museum of Namibia.

Body mass of live-caught individuals was measured with a 50 g Pesola balance, to the nearest gram. Amongst other body measurements, standard wing-length (distance between the carpal joint of the bent wing to the tip of the longest primary) and tail-length (from insertion to tip of longest rectrix) were measured with a steel rule. All measurements made with the steel rule were taken to the nearest 0.5 mm.

Of the 260 specimens and live birds measured, 45 were sexed by obvious nuptial plumage and 26 were sexed by

dissection. For the purpose of this note, the method of Green & Theobald (1989) is used to provide a graph of wing- and tail-length, with probability contours corresponding to specified probabilities that any measured bird is male. Using this method, ringers may allocate a sex to a measured bird with some measured degree of confidence.

Table 1: Body measurements of Chestnut Weavers according to known sex (males: n = 42; females: n = 29).

Body measurement		mean	± SD	t[1]	P
Bill-chord (mm)	Male	20.93	0.76	7.86	<0.001
	Female	19.57	0.69		
Bill-width (mm)	Male	8.47	0.31	2.98	<0.01
	Female	8.20	0.42		
Bill-height (mm)	Male	10.89	0.45	5.99	<0.001
	Female	10.28	0.40		
Skull-length (mm)	Male	36.31	1.27	6.76	<0.001
	Female	34.40	1.10		
Wing-length (mm)	Male	83.68	1.50	18.71	<0.001
	Female	77.52	1.26		
Tail-length (mm)	Male	52.41	1.81	13.33	<0.001
	Female	47.35	1.39		
Tarsus	Male	22.86	0.89	7.61	<0.001
	Female	21.43	0.69		

t[1] Unpaired t-test.

RESULTS AND DISCUSSION

Body measurements of Chestnut Weavers of known sex are shown in Table 1. The frequency distributions of body measurements of all birds measured, and for known males and females are illustrated in Figure 1. The underlying

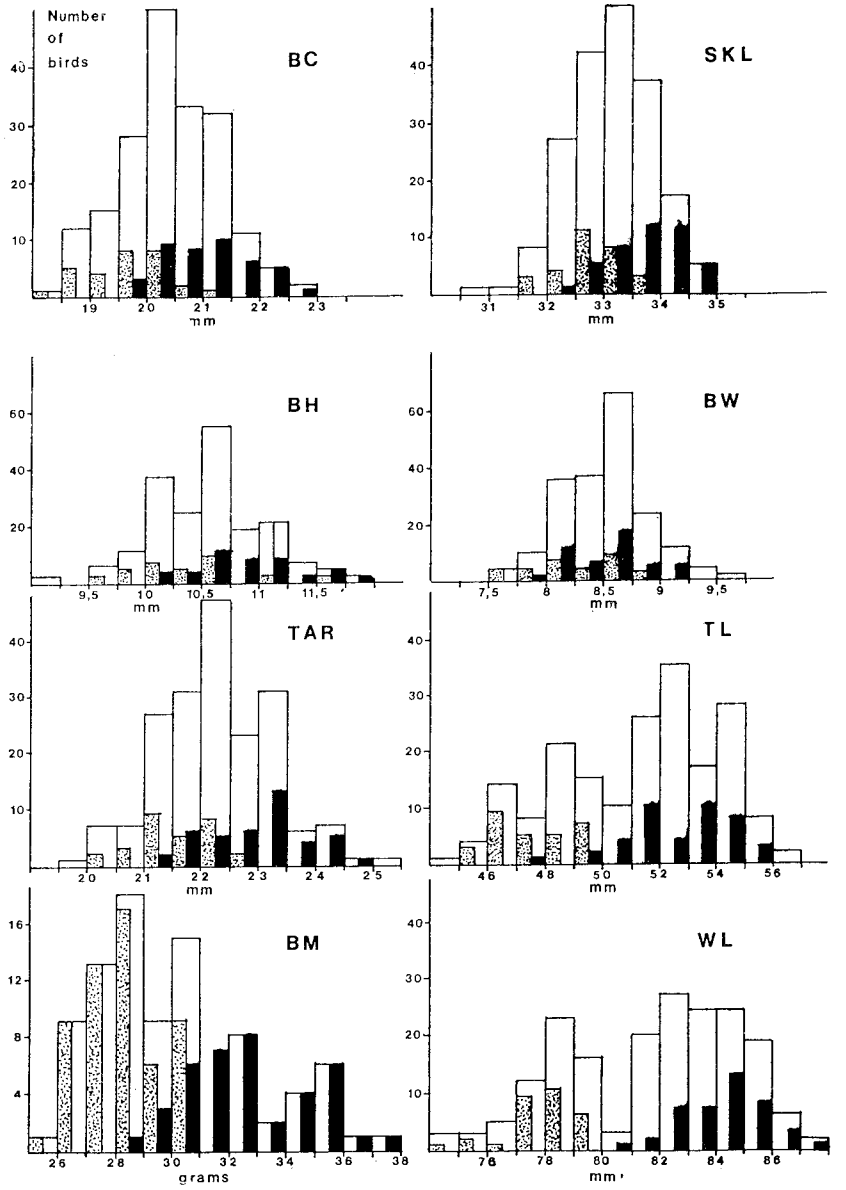

Figure 1: The frequency distributions of body measurements of Chestnut Weavers (BC = bill-chord, SKL = skull-length, BH = bill-height, BW = bill-width, TAR = tarsus, TL = tail-length, BM = body mass, WL = wing-length). Clear bars are all unsexed birds (n = 189), black bars are known males (n = 42) and grey bars are known females (n = 29). The frequency distribution of body mass is based on live-captured birds and anatomical specimens weighed at capture (n = 94; this study and unpublished data) and classified to correct sex retrospectively using discriminant analysis.

CRAIG, A.J.F.K. & MANSON, A.J. 1981. Sexing Euplectes species by wing-length. Ostrich 52:9-16.

GREEN, P.T. & THEOBALD, C.M. 1989. Sexing birds by discriminant analysis: further considerations. Ibis 131: 442-447.

JAMES, F.C. 1970. Geographic size variation in birds and its relationship to climate. Ecology 51: 365-390.

KOMEN, J. in press. Size variation in the Chestnut Weaver. Cimbebasia.

MACLEAN, G.L. 1985. Roberts' birds of southern Africa. John Voelcker Bird Book Fund, Cape Town.

WHAT IS THE STATUS OF THE DAMARA REDBILLED HORNBILL?

The Damaraland population of the Redbilled Hornbill Tockus erythrorhynchus damarensis has been recognised as distinctive since its description by Shelley in 1888. More recently, Kurt Sanft of Berlin, in his 1960 monograph of the Bucerotidae (Das Tierreich 76), confirmed that the population was indeed discrete but that, based on museum skins, it appeared to be intergraded with the more north-easterly T. e. rufirostris.

The two populations are easily separated in the field; the Damaraland form has a dark brown eye set in a very white face and the more easterly form T. e. rufirostris has a yellow eye set in a face with grey cheeks. The Damaraland hornbill also has much more white in the secondaries and tail, almost as much as a Monteiro's Hornbill T. monteiri.

Recently I was able to visit Namibia briefly, to begin to explore this problem and it seems sufficiently exciting to ask the help of local bird enthusiasts in effecting its solution. On my travels to the Daan Viljoen Game Reserve near Windhoek, to the farm Otjongoro north-west of Omaruru and to Okahandja and Otjiwarongo, I only encountered the Damaraland race of this Hornbill. By superimposing the map of specimen localities from Sanft's (1960) monograph on the that of sight records from the Namibia Bird Atlas, supplied to me by Dr Chris Brown, one can expect a possible hybrid zone to lie just east of a line passing through Otjiwarongo and Ruacana (see figure).

What is required now is to find the exact position of the contact zone between the populations, and I therefore ask for any sightings, old and new, of Redbilled Hornbills whose eye colour is known. Old photographs, quick checks while driving around or previous recollections will all be welcome. Please send your records to Dr Alan Kemp, Department of Birds, Transvaal Museum, P.O. Box 413, Pretoria 0001, South Africa.

The importance of the question is that this may prove to be yet another 'South-west Special', the Damaraland Redbilled Hornbill, a good species in its own right. Its known range fits that of many other endemics, and its distinctive coloration, including much more extensive pink throat patches than found in other Redbilled Hornbills, as well as possible differences in behaviour, all support this viewpoint.

It is interesting to note that the isolated East African population of Redbilled Hornbills, the nominate race T. e. erythrorhynchus, also seems to prefer drier habitats than the southern form T. e. rufirostris, and has a brown eye and white face. It differs somewhat in its