

A RINGING GUIDE TO SELECTED SPECIES OF ZIMBABWEAN SUNBIRDS

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INTRODUCTION

Over the last few years there has been a growing interest and awareness of this group of birds but the difficulty of identifying birds in plumages other than of adult males, both in the hand and in the field, has rather restricted the value of many observations. The information presented here has been collated from a five year ringing study made on Chirawanoo farm, Mashonaland West, and is intended specifically for Zimbabwean ringers, but may also be of value to people elsewhere in southern Africa as all but the Coppery and Miombo Doublecollared Sunbirds occur outside this country. Mensural data for the Black Sunbird is, however, only applicable to the more northern race *kirkii*. It is not intended here to give detailed plumage descriptions of each species, but rather to highlight important identification criteria and other features to look out for, such as belly colouration in the Whitebellied Sunbird.

GENERAL

- a) Plumage Adult males are always distinguishable and are not dealt with in the specific text except in cases where a species assumes an eclipse plumage which in the following cases applies only to Coppery and Purplebanded Sunbirds. Many young males are only safely distinguishable from females once they start assuming adult dress and in all cases of the following, except Coppery, assume some of the throat and breast colouring only at first. In the case of Black and Scarletched Sunbirds, an immature plumage remains for some months in which only the adult throat or breast colouring respectively is assumed. Beware of some adult female Whitebellied Sunbirds which can assume a degree of gloss on the lesser wing and upper tail covert feathers and even occasionally on the crown.
- b) Gape Always check gape as this is one of the most reliable methods of ageing young birds versus adult females. Juvenile birds have a swollen gape ranging in colour from whitish to orangish, e.g. the whitish gape of the Scarletched darkens to yellowish on the post juvenile/immature, to orangish and brownish on the later immature/sub-adult and then to black in the adult. A few females of the Whitebellied appear to retain the brown gape well into adulthood and possibly for life.

- c) Moult Some species, if not all, appear to have a suspended moult of the primaries and other feathers when moulting from juvenile into immature plumage. This is particularly noticeable among western forms of Whitebellied and Scarletched, but may be found to some degree in all populations and species and may be a response to a period of extensive movement or other forms of stress. Occasionally adults, e.g. Coppery, also arrest moult during the winter months, but most species appear to have completed moult of remiges and rectrices by late summer. Much more information is required on summer moulting birds, but few are caught at this time.
- d) Problem birds Many juveniles/immatures and females offer serious identification problems owing to considerable variation in plumages, especially of the underparts. Difficult pairs, where extreme caution must be taken in identification, are:
- a Black and Scarletched.
 - b Early juvenile Miombo Doublecollared and Yellowbellied.
 - c Whitebellied and Yellowbellied.
 - d Marico and Black.

Care must also be taken with eclipse males of Coppery and Purplebanded as these appear similar to their respective females/immatures, but usually retain a degree of adult plumage.

COPPERY SUNBIRD *Nectarinia cuprea*

Plumage and bare part features

Eclipse males retain coppery gloss of lesser wing coverts and upper tail coverts and a variable amount of black blotching on otherwise yellow underparts. Has a relatively longer tail than other species of "short"-tailed sunbirds.

In all plumages, other than breeding males, there is a clean cut line between eye patch (which is slightly darker than crown) and yellow underparts. These features become less distinct in worn plumage. The supercilium is slight, starting above the eye and fading out backwards. The outer web of the outer tail feathers is pale cream for more than half it's length merging into olive-brown for the remainder and the inner web.

Note shortish tarsus while bill stoutish and not as decurved as most other sunbirds. Gape of juvenile orangish.

Measurements

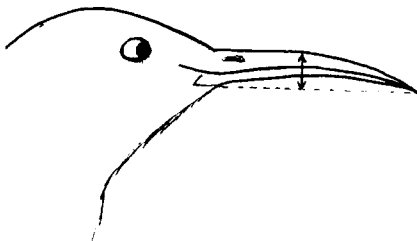
	ADULT (M)	JUV/IMM (M)	ADULT (F)	JUV/IMM (F)
WING	62,5-66,0	59,0-63,0	57,0-60,0	55,0-60,0
BILL	20,5-23,5	19,0-22,5	20,0-22,0	19,0-22,0
TARSUS	16,0-17,0	15,0-17,0	14,5-16,5	15,0-16,5
TAIL	45,0-51,0	38,5-45,0	41,0-44,0	36,0-43,0
MASS	9,3-10,2	8,2-10,5	8,5- 9,9	7,8- 9,5

Many young birds are not safely separable on sex.

MARICO SUNBIRD *Nectarinea mariquensis*

Plumage and bare part features

The males are similar to those of the Purplebanded, but are larger, so easily separated on measurements. The breast band is more plum-coloured. Immature males assume adult plumage gradually, starting with the breast band. Post-juvenile males are almost identical to their equivalents in the Black Sunbird and are possibly the most difficult of our sunbirds to separate in the hand and impossible in the field. The breast is **generally** less marked and gives more the impression of streaking while that of the Black Sunbird more strongly marked giving more of an impression of barring. The bill of all Maricos is **less** decurved than that of the Black Sunbird and it may be necessary to institute a new measurement here, that of maximum bill curve depth.



The females can be very similar to those of the rather variable Black Sunbird but the throat is **mottled** grey this radiating out through breast to flanks and belly. **Check breast feathers carefully** - each has a darkish centre with pale edging all around (see Black Sunbird for distinction).

The yellow background is variable in both intensity and extent. Supercilium faint running from above to behind eye (see Black Sunbird). Tail markings very variable and overlap widely with those of the Black Sunbird.

Measurements

So far I have few measurements to go on.

	MALES	FEMALES
WING	64-72	58-63
BILL	23,0-25,5	21,5-24,5
TARSUS	17,0-19,5	16,0-17,5
TAIL	44,5-52,0	38,0-43,0
MASS	11,1-13,7	9,9-11,8

PURPLEBANDED SUNBIRD *Nectarinea bifasciata*

Plumage and bare parts features

This is a very small sunbird and with its very short bill, should not be confused with any other Nectariniidae.

The Purplebanded is a migrant to the highveld from lowveld areas arriving mainly June/July and departing November/December. Occasional early birds back to late April and late birds into January. Most noticeable away from riparian growth from June into early August. Adult males moult rapidly into eclipse plumage and few full plumaged birds are seen by January. At this time birds are locally very common in the Zambezi Valley and adult males retain the glossy lesser wing coverts and upper tail feathers and a variable small amount of dark underparts. Adults normally assume breeding dress before arriving on the highveld although a few do show some non-breeding dress. Immature males arrive with all different stages of breeding dress assumption taking about 8-10 weeks to complete the transition. Always check the gape of these birds, immatures are orange/brown and adults black.

Adult females and immatures are well streaked/blotched on breast with yellowish on abdomen. Always check gape for age.

Measurements

	ADULT (M)	IMMATURE (M)	ADULT (F)	IMMATURE (F)
WING	56,0-60,0	53,5-60,0	51,0-54,5	51,0-54,0
BILL	16,0-19,5	16,0-19,5	15,5-18,0	15,5-18,0
TARSUS	14-16	14-16	13-15	13-15
TAIL	35,0-43,0	35,0-43,0	33,0-37,5	33,0-37,5
MASS	6,3-8,8	6,3-8,8	6,0-7,3	6,0-7,3

MIOMBO DOUBLECOLLARED SUNBIRD (MIOMBO SUNBIRD) *N. manoensis*

Plumage and bare part features

Only one species of doublecollared sunbird has so far been found in Zimbabwe. Adult males are distinctive. Females are grey on upper parts and greyish on under parts with a slight patch of yellow on mid-belly (do not confuse with large examples of grey-bellied Whitebellied Sunbirds). Some females may have a yellowish wash over a much extended area of underparts (check gape for ageing). Freshly fledged juveniles are quite yellow underneath but otherwise very similar to adult females. This yellow is lost fairly rapidly in first six weeks of leaving nest, when they then closely resemble adult females, but have an orangish gape. Neither females or young have white on tail.

Measurements

	ADULT (M)	JUV/IMM (M)	ADULT (F)	JUV/IMM (F)
WING	61,0-68,0	58,5-65,5	55,5-59,5	54,0-59,0
BILL	23,5-26,0	22,0-26,0	22,0-25,0	19,0-25,0
TARSUS	17,0-19,0	16,0-19,0	15,5-18,0	15,5-18,0
TAIL	44,0-50,0	43,0-49,5	39,0-43,5	36,0-43,0
MASS	9,2-11,7	8,9-10,6	7,7-10,2	7,6- 9,8

WHITEBELLIED SUNBIRD *Nectarinea talatala*

Plumage and bare part features

Always note colour of underparts of **all** ages and sex groups. There appear to be three groups of belly colours as follows:

- (a) Light grey - grey-dark grey, usually with a yellowish patch of different size and intensity in the centre of belly (beware of similarity to female/immature Miombo). Coded LG/G/DG with y-/y/y+, the latter indicating intensity and extent of yellow (e.g. LG/y = light grey with poor yellow patch).
- (b) White: nearly always has a variable yellow patch mid belly, occasionally totally white.
- (c) Yellow: whole underpart completely or variably suffused with a pale yellowish wash. Indicate intensity and extent by B-/B/B+ (indicating "butter" as colour similar).

If in doubt as to specific identity, check outer tail feathers: the outer web of the outer feathers and tip of inner web white.

Freshly fledged juveniles look rather like a curved-billed immature Willow Warbler with a greenish wash to upperparts, a yellow supercilium, greenish-yellow throat and light yellow underparts.

Gape of juvenile yellow-white darkening slowly to yellowish-orange and eventually brown in subadult and black in adult. Some adult females retain brown gape.

Measurements

	ADULT (M)	JUV/IMM (M)	ADULT (F)	JUV/IMM (F)
WING	53,0-58,5	53,0-58,5	49,0-55,0	49,0-55,0
BILL*	20,5-26,0	20,5-26,0	19,0-23,0	19,0-23,0
TARSUS	14,0-17,5	14,0-17,5	14,0-17,5	14,0-17,5
TAIL	35,5-42,0	35,5-42,0	31,0-41,0	31,0-41,0
MASS	6,6-9,0	6,1-8,9	6,0-8,8	5,8-8,3

* Majority of both sexes in range 20-24.

Grey-bellied birds tend to be a little larger than other groups.

BLACK SUNBIRD *Nectarinea amethystina kirkii*

Plumage and bare part features

Immature males assume the purplish throat of adult plumage long before the remaining black plumage but prior to that are almost identical to the same age/sex group of the Marico (see under that species).

Juvenile males have a blackish throat, this being absent in females.

Females are variably streaked from the throat, this radiating out onto the breast and flanks. The intensity of streaking is **very** variable and in occasional specimens almost completely lacking, giving the impression of a female Miombo Doublecollared Sunbird with a yellow wash over the underparts.

However, the Black Sunbird usually has some degree of white on the tail. The background colour of the breast is yellow, this varying in intensity. Check gape for ageing.

All birds other than adult males have a **full** supercilium and do **not** have white on the alula and outer primary coverts (cf. Scarletched Sunbird).

Gape of juvenile yellowish-white.

Bill curve depth may be necessary for separation from certain plumages of Marico Sunbird.

Measurements

	ADULT (M)	JUV/IMM (M)	ADULT (F)	JUV/IMM (F)
WING	67-72	65-70	61-67	61-67
BILL	24,0-27,0	24,0-27,0	22,5-25,5	22,5-25,5
TARSUS	15,5-18,5	15,5-18,5	15,5-18,5	15,5-18,5
TAIL	42,0-49,5	36,0-43,5	37,0-46,5	34,0-43,0
MASS	10,7-14,7	10,6-12,6	10,0-12,2	9,2-11,9

These measurements may have to be revised in the light of new ageing/sexing criteria now available.

SCARLETCHESTED SUNBIRD *Nectarinea senegalensis*

Plumage and bare parts features

Immature males assume the red throat only and do not assume the remainder of their adult plumage for several months. The red throat is assumed at the later stage of the birds first moult of its remiges, when about three or four months of age and the full adult plumage is only assumed when 9-11 months old.

Females and immature males have **varying amounts** of **white** on bastard wing and outer primary coverts. The supercilium starts from **just above** or **behind** the eye swinging dorsally a short distance. The amount of brown mottling on underparts varies a fair amount as does the background colouring from off-white to light yellowish. Have a fine white edging only to outer web of outer tail feathers. Juvenile birds have a very barred breast and a whitish gape changing to yellow etc. with increasing age.

Females and immatures of the eruptional western form *saturation* are much darker and more densely mottled below, whilst adult males have a darker, duller red gorget with wider blue tipping to the feathers.

Measurements

	ADULT (M)	JUV/IMM (M)	ADULT (F)	JUV/IMM (F)
WING	72,5-81,0	69,0-77,0	65,0-72,0	64,0-71,0
BILL	27,0-32,0	26,0-32,0	24,5-29,0	24,0-29,0
TARSUS	17,0-19,5	17,0-19,5	16,0-19,5	16,0-19,5
TAIL	48,5-56,5	42,0-52,0	39,5-49,0	38,0-48,5
MASS	11,7-17,2	11,7-16,5	11,2-15,2	10,4-15,1

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