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TIP OF THE ICEBERG: HYBRID CAPE SPARROW AND GREAT SPARROW IN NAMIBIA

Ursula Franke-Bryson

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AFRING NEWS

TIP OF THE ICEBERG: HYBRID CAPE SPARROW AND GREAT SPARROW IN NAMIBIA

*Ursula Franke-Bryson**Munich, Germany*

*Corresponding author: praxis@ursula-franke.de



Figure 1 – Hybrid Cape x Great Sparrow (or Southern Rufous Sparrow).

In December 2014 we caught and ringed a male sparrow (ring CV35323) with features both of Cape Sparrow and Great Sparrow on the farm Sphinxblick in Namibia at 2224S 1530E.

It had a dark grey crown, black in Cape Sparrow; crown framed on both sides by pale rufous sides to the neck, darker in Great and white in Cape Sparrow; grey cheeks with black spots, which are white in Great and black in Cape Sparrow; a strong black throat patch from Great Sparrow, but no black breast band as in Cape Sparrow. The upper back showed some streaking, prominent in Great and absent in Cape Sparrow (see Figure 10, 11 and 12). The bird was aged as an adult mainly by the fully developed white fringes of the greater wing coverts and the bill which is black all year in Great and turns black in Cape Sparrow for the breeding season (Hockey et al. 2005; Peacock 2012, p. 268 - 271).

The measurements, roughly speaking, show the hybrid at the upper edge of Cape Sparrow and the lower third of the Great Sparrow size scale (Table 1). To gather more information for the identification, we also compared the phenomenology of the hybrid bird with young Great Sparrows and young Cape Sparrows. Juvenile Great Sparrows are similar to adults of respective sex, but paler (Clement et al. 1993:454).

Table 1 – Comparison of measurements of male fully grown Great and Cape Sparrows, taken in the area of our bird ringing activities.

| Measurements | Cape Sparrow | Great Sparrow | Hybrid |
|--------------|--------------|---------------|--------|
| Mass (g) | 18 – 28 | 25,5 – 34 | 27,2 |
| Wing (mm) | 64 – 83 | 79 – 95 | 84 |
| Head (mm) | 28,1 – 31,6 | 29,3 – 34,9 | 32,4 |
| Tail (mm) | 51 – 67 | 53 – 91 | 58 |
| Tarsus (mm) | 17,8 – 21,7 | 18 – 24,2 | 20,7 |



Figure 2 – Male Great Sparrow, fully grown.



Figure 4 – Male Cape Sparrow, fully grown



Figure 3 - Young male Great Sparrow in first adult plumage: “baby face“, small black bib, still short beak, pale muddy eye colour and developing eye mask.



Figure 5 – Juvenile Great Sparrow (sex still unknown) in first plumage: gape flange, pale rufous and buff grey head markings and buff coverts.



Figure 6 – Young Cape Sparrow with yellow gape and juvenile darkish mask of a male in still uniform grey.



Figure 8 - ... and a further moulted Cape Sparrow male with fully developed breast band and some fresh coverts...



Figure 7 - Young Cape Sparrow with first signs of black face mask and grey throat, a small bib and gape flanges...



Figure 9 - ... to reach full adult plumage.

Sparrows are known to hybridise easily

For the Old World Sparrows hybridization the House Sparrow *Passer domesticus* can serve as an example for the wide range of possible partners. One of the most numerous bird species on the planet, it has been recorded cross-breeding with several other sparrow species in its home range, but also all over the world in the areas of its introduction and invasion: „quite frequently“ with the Eurasian Tree Sparrow *Passer montanus* (Summers-Smith 2009b in del Hoyo et al., p. 804), not only in his home range but also in areas where both had been introduced, „extensively“ with the Spanish Sparrow *Passer hispaniolensis* (Summers-Smith 2009b in del Hoyo et al., p. 794), with the Italian Sparrow *Passer italiae* (ibid.), with the Somali Sparrow *Passer castanopterus* in Somalia (Ash & Colston, 1981; Summers-Smith 2009b in del Hoyo et al., p. 793) and the Sudan Golden Sparrow *Passer lutetus* (Avibase).

The list includes, beyond the sparrows species (Passeridae), also hybrids with Finches and Canaries (Fringillidae) such as Chaffinch *Fringilla coelebs*, Domestic Canary *Serinus canaria* (var. *domesticus*) or European Greenfinch *Chloris chloris*, with Estrildidae, like the Java Sparrow *Lonchura oryzivora*, and with Buntings and New World Sparrows (Emberizidae) like Chipping Sparrow *Spizella passerina*, either in the wild or in aviculture, (Avibase; McCarthy 2006). Of all the sparrows from Africa and Europe cross-breed at least 16 species with other species (McCarthy 2006).

And finally the Cape Sparrow

Also hybrids of the Cape Sparrow are documented: with the House Sparrow (Summers-Smith 2009a in del Hoyo et al., p. 800), in captivity with the Grey-headed Sparrow *Passer griseus* and the Sudan Golden Sparrow (McCarthy 2006, p. 269-270). From the wild my research in literature resulted only in one documented record

(Fraser et al. 1992) and in the internet only a few photos (Shedman 2010), although I found in non-scientific literature that „the two species freely and naturally hybridise in many areas of South Africa and Namibia“ (Carnaby 2008, p. 193, no further references given).

The tip of the iceberg?

Some of the sparrow species are very similar by systematical and phenomenological criteria and hybrids with their variation of mixed features might be undetected, overlooked or regarded as subspecies. (See the example of the Sind Sparrow *Passer pyrrhonotus* in Summers-Smith 2009f:795, and in the EOL database). We do not know how many sparrow hybrids live unperceived. To the best of my knowledge this is the only documented occurrence of a *Passer melanurus* x *Passer motitensis* hybrid.

For comparison here are the backs of a Cape Sparrow, Great Sparrow and Hybrid Great Sparrow x Cape Sparrow:



Figure 10 – Cape Sparrow male



Figure 11 – Great Sparrow male, subspecies *benguellensis* (Namibia and coastal SW Angola)



Figure 12 – Hybrid Great Sparrow x Cape Sparrow male.

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Editor's note: This information first appeared on the web at <http://faansiepeacock.com/sparrow-hybrids/>