Short notes and reviews

On the history and type specimens of the Cape Verde Cane Warbler Acrocephalus brevipennis (Keulemans, 1866) (Aves, Sylviidae)

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Abstract

The Cape Verde Cane Warbler Acrocephalus brevipennis was first described in 1866, and again in 1871 and 1883. These descriptions were all made after specimens from the same series. A type specimen was never designated and only one syntype from the original series can be traced today. The taxonomic history of the species is discussed and the single remaining syntype described. The present status and distribution of the species are briefly discussed.

Introduction

The Cape Verde Cane Warbler Acrocephalus brevipennis (Keulemans, 1866) is one of a group of four "swamp warblers" sometimes considered to constitute the separate genus Calamocichla, the other species being A. rufescens (Sharpe & Bouvier, 1876) and A. gracilirostris (Hartlaub, 1864), both Afrotropical, and A. newtoni (Hartlaub, 1863) from Madagascar. White (1952) found no convincing reasons to maintain Calamocichla as a distinct genus and it is now usually synonymized with Acrocephalus. Watson et al. (1986) maintained Calamocichla as a subgenus of Acrocephalus for the four species mentioned above. To the same group may also belong Bebrornis rodericanus (A. Newton, 1865) from Rodriguez Island and B. sechellensis (Oustalet, 1877) from the Seychelles, now commonly placed in Acrocephalus (cf. Hall & Moreau, 1970). The six species were joined in the genus Calamocichla by Wolters (1980). In the present paper the intricacies of the taxonomic history of *Acrocephalus brevipennis* are discussed and some data on its present status and distribution are given.

Descriptions of the species

The first reference to the Cape Verde Cane Warbler was made by Bolle (1856: 20), who mentioned the occurrence of a sylvid on the island of São Nicolau "larger than the Garden Warbler *Sylvia hortensis* [name for *S. borin* (Boddaert, 1783) at that time] and coloured more rufous, which I once encountered in the orange-gardens of Ribeira Brava, above the waterfall of the brook". The German Carl Bolle stayed in the Cape Verde Islands from July 1851 to December 1852, spending most of his time on São Nicolau.

The German Heinrich Dohrn and the Dutchman Johan G. Keulemans (the latter acting as a taxidermist for Dohrn) stayed in the Cape Verdes from December 1864 to March 1865. They visited the islands of Santo Antão, São Vicente, São Nicolau, and Santiago. Keulemans (1866) published an account of his visit to the islands and described – albeit in a rather sketchy manner – the Cane Warbler as *Calamodyta brevipennis*. In his paper, Keulemans stated that this name had been coined by Dohrn. Five years later, Dohrn (1871) published a more technical description, including measurements, under the name *Calamoherpe brevipennis* n. sp., without, however, detailing the number of specimens measured and where they were collected. Neither Keulemans nor Dohrn designated a type specimen, but both mentioned the occurrence of the species on São Nicolau and Santiago.

Sharpe (1883) published the new genus Calamocichla, to include C. newtoni and C. brevipennis, without defining the genus or designating a type species for it. A definition of a sort, however, can be found in the "Key to the Genera of Bradypteri" in the same volume. In a footnote to C. brevipennis, Sharpe (1883: 132) added that "as far as I can find out, this species has never been described - I therefore adopt Dr. Dohrn's MS. name". Apparently, he adopted the name from Keulemans' paper, which he mentioned in the heading, and it appears that Sharpe agreed with Keulemans in regarding Dohrn as the first author of C. brevipennis. Obviously, he overlooked Dohrn's (1871) own paper. Sharpe (1883: 132) did, however, mention the specimen from which he described his Calamocichla brevipennis, i.e. a skin from São Nicolau from the Dohrn collection. Some subsequent authors referred to the species as Calamocichla brevipennis (Dohrn, 1871), while others recognized Keulemans as the first describer. Later, Murphy (1924: 275) pointed out that "Keulemans' designation has priority and satisfies all the technical requirements of nomenclature".

Further generic changes

Contrary to the statement by Watson et al. (1986), newtoni was not the type species, by monotypy, of Calamocichla, as Sharpe (1883) included two species in that genus. The designation of a type for the genus Calamocichla was done by Shelley (1896), who indeed made Calamoherpe newtoni Hartlaub, 1863, the type species.

Neumann (1908) published a revision of *Calamocichla* in which he recognized nine species and pointed out the close resemblance to *Acrocephalus*. Regarding *brevipennis*, he mentioned the presence of "one co-type of Dohrn's" in the British Museum (p. 251). He found reasons, however, to separate *newtoni* from *Calamocichla* and erected a new genus *Hemiellisia* for it, with *Calamoherpe newtoni* Hartlaub, 1863, as type species, thus leaving brevipennis as the type species of the genus Calamocichla by elimination. Sclater (1927) correctly argued that Neumann's (1908) action was not justified because Shelley (1896) had made newtoni the type species of Calamocichla, and that therefore the genus Calamocichla should be restricted to that species. As he followed Neumann (1908) in his assertion that newtoni is not congeneric to the other "Calamocichla" species, it became necessary to propose yet another genus name, for which he proposed Calamornis, with Calamodyta brevipennis Keulemans, 1866, as type species. To add to the confusion, it turned out that Calamornis was preoccupied by Calamornis Gould, 1874 (the type species of which is Paradoxornis heudei David, 1872, a parrotbill from China), and Sclater (1936) then altered the name of the genus to Calamoecetor, with type species Calamodyta brevipennis Keulemans, 1866, as before.

Next came a revision of the genus *Calamoecetor* by Bannerman (1937) in which he recognized five species, still excluding *newtoni*. Bannerman (1937: 294) examined "a co-type" of *brevipennis* in the British Museum, but concerning this species he also stated "type not examined" (p. 298), apparently not being aware that a holotype had never been designated. Finally, Chapin (1949) made it clear that the differences between *Calamoecetor* and *Calamocichla* (i.e. *newtoni*) are too slight to require separation, and he only recognized the four *Calamocichla* species mentioned in the introduction of the present paper.

The Dohrn-Keulemans collection

Dohrn and Keulemans appear to have collected a considerable number of bird specimens during their stay in the Cape Verde Islands (cf. Dohrn, 1871), but the whereabouts of the larger part of this collection is uncertain at present. Some duplicates went to the Leiden and Berlin museums, but no *A. brevipennis*. One duplicate specimen of *A. brevipennis* went to the British Museum (Natural History). It is thought that the majority of the collection was kept at the Stettin museum in Dohrn's hometown. In 1947, all material from the Stettin museum (which had then become Szczecin, Poland), was transferred to the Institute of Zoology of the Polish Academy of Sciences in Warsaw (K. Dobrowolski, in litt., 1992). However, none of Dohrn's specimens could be found in the Warsaw collection in February 1992 (A. Słojewska, in litt., 1992).

As it is clear that Keulemans (1866), Dohrn (1871), and Sharpe (1883), in their descriptions of *brevipennis*, were all dealing with specimens (or at least one specimen) from the same series, the skins they handled are in fact syntypes. At present, the only available skin from the original series is the single specimen in the British Museum (Natural History) (BMNH). As long as the remainder of the Dohrn-Keulemans collection has not been traced (if it still exists), the existence of any other syntypes of *A. brevipennis* remains uncertain.

The syntype in BMNH

The specimen described by Sharpe (1883) is not listed by Warren & Harrison (1971). Probably due to the diffuse history of the species, they failed to recognize it as belonging to a syntypical series. Moreover, C.S. Roselaar (pers. comm., 1992) informed me that he did not come across this skin when studying specimens of the species at BMNH. Therefore, I inquired at BMNH whether the skin described by Sharpe (1883) still existed in the collection. This was indeed the case, but it turned out that it was labelled "Calamodyta brachyptera Dohrn, brevipennis?", brachyptera apparently referring to Bradypterus brachypterus (Vieillot, 1817), a synonym of B. baboecala (Vieillot, 1817), a widely distributed Afrotropical species. According to the label, the specimen was purchased from F. Geale, and the registration number (1866-7-20-10) indicates that this happened soon after Dohrn's return to Europe. Further information is provided by Sharpe (1906: 356), who mentioned that Geale's birds were duplicates from Dohrn's collection, prepared by J.G. Keulemans. These duplicates concerned 10 specimens which were listed by Sharpe (1906) as originating from Principé in the

Gulf of Guinea, an island visited by Dohrn and Keulemans after they had left the Cape Verdes. Much earlier, the same skin had been listed correctly by Gray (1869: 207) as *Calamodyta brevipennis*, Dohrn, Cape Verde Is. This listing is printed in bold type, i.e. "species contained in the British Museum". Gray (1869: 209) also listed *Bradypterus brachyptera*, but this listing is printed in normal type, i.e. "species that are at present desiderata to the collection".

At the moment, the only remaining syntype of Acrocephalus brevipennis (Keulemans, 1866) appears to be the one in BMNH (BM Reg. No. 1866-7-20-10, H. Dohrn coll.), type locality the island of São Nicolau, Cape Verde Islands. The skin is of an unsexed immature that would be about 2-3months old. Judging from Keulemans' (1866) itinerary it was collected in February 1865. Sharpe (1883) referred to the skin as adult, but this was already pointed out to be wrong by Alexander (1898). In the present skin, the upperparts and upper wingcoverts are cinnamon-brown, not brown-grey as in adults. Colouration is, however, slightly browner than in juvenile plumage and somewhat intermediate between adult and juvenile due to partial moult. The primaries, secondaries, tail, and undertailcoverts are still of the loose juvenile feather type. In A. brevipennis, it is not possible to discriminate between males and females on the basis of size alone. The size measurements of 15 males and 6 females did not show significant differences between the sexes (C.S. Roselaar, in litt., 1992). For the sake of completeness, I herewith give the measurements (in mm) of the BMNH specimen: wing 63, tail 55.5, tarsus 25.3, bill to skull 21.8, bill to nostril 12.3, exposed culmen 16.1.

Remarks on present status and distribution

Formerly, the Cape Verde Warbler was known from the islands of Santiago, Brava, and São Nicolau, but it now only survives on the first island. In the years 1988–1992, when I stayed in the Cape Verde Islands for several months each year in connection with the National Parks and Protected Areas Programme of the Instituto Nacional de Investigação Agrária (Cabo Verde) and the International Council for Bird Preservation (Netherlands Section), intensive searches for the species on Brava and São Nicolau remained without result.

In April 1897, the species was reported to be "fairly numerous" on São Nicolau and chiefly found in the coffee plantations (Alexander, 1898: 103). It was last recorded from São Nicolau by the Blossom Expedition, who collected three specimens in February 1924 (cf. Rhoades, 1952). R. de Naurois (in litt., 1989), the first ornithologist to visit São Nicolau since 1924, could not find it on the island during several visits in the 1960s.

The species was first recorded from Brava by Alexander (1898: 91), who found it "by no means plentiful" in March 1897, imputing its rarity to "the growth of sugar-cane being very small" on the island. The last record from Brava appears to be of one collected by J.V. dos Santos in October 1969 (cf. Frade, 1976).

In the years 1988–1992, the total population on Santiago was thought not to exceed 500 pairs (Hazevoet, in press). During this period, while conducting fieldwork for the forthcoming Atlas of breeding birds of the Cape Verde Islands (cf. Hazevoet, 1991), it was found in 11 out of the 50 5×5 km squares on the island. On Santiago, it is restricted to well-vegetated valleys, irrigated plantations, and some villages and human settlements where vegetation is sufficient. Its extinction on São Nicolau and Brava is probably caused by habitat loss due to the continuing desiccation of these islands. This has restricted agricultural activity enormously compared to some 40 years ago and earlier, when an export-trade of fruit of many kinds was conducted on São Nicolau and sugar-cane was widely grown there. The coffee plantations on São Nicolau, referred to as a favourite resort of brevipennis by Alexander (1898), have now almost completely ceased operations. Its original habitat, probably scrubs on the mountain slopes and reedbeds in the valleys, has long been cleared during the past 500 years of colonization of the Cape Verde Islands. A more detailed account on the species' ecology, behaviour, and conservation requirements will be published elsewhere (Hazevoet, in prep.).

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References

- Alexander, B., 1898. An ornithological expedition to the Cape Verde Islands. Ibis, (7)4: 74-118.
- Bannerman, D., 1937. A review of the genus Calamoecetor Sclater (formerly Calamornis Scl.). Ibis, (14)1: 294-301.
- Bolle, C., 1856. Die Vogelwelt auf den Inseln des grünen Vorgebirges. J. Orn., 4: 17–31.
- Chapin, J.P., 1949. Relationships and voice in the genus Calamocichla. In: E. Mayr & E. Schüz (eds.), Ornithologie als biologische Wissenschaft, Festschrift Erwin Stresemann: 7-16 (Carl Winter Universitätsverlag, Heidelberg).
- Dohrn, H., 1871. Beiträge zur Ornithologie der Capverdischen Inseln. J. Orn., 19: 1-10.
- Frade, F., 1976. Aves do arquipélago de Cabo Verde (Colecção do Centro de Zoologia da J.I.C.U.). Garcia de Orta (Zool.), 5: 47-58.
- Gray, G.R., 1869. Hand-list of genera and species of birds distinguishing those contained in the British Museum, I: i-xx, 1-404 (Trustees of the British Museum, London).
- Hall, B.P. & R.E. Moreau, 1970. An atlas of speciation in African passerine birds: i-xv, 1-423, maps 1-439 (Trustees of

the British Museum (Natural History), London).

- Hazevoet, C.J., 1991. The atlas of breeding birds in the Cape Verde Islands, introduction and manual: 1-26, figs. 1-5 (Instituto Nacional de Investigação Agrária/Institute of Taxonomic Zoology, São Jorge dos Orgãos & Amsterdam).
- Hazevoet, C.J., in press. The birds of the Cape Verde Islands. B.O.U. check-list (British Ornithologists' Union, Tring).
- Keulemans, J.G., 1866. Opmerkingen over de vogels van de Kaap-Verdische Eilanden en van Prins-Eiland (Ilha do Principe) in de bogt van Guinea gelegen. Ned. Tijdschr. Dierk., 3(11-12): 363-401.
- Murphy, R.C., 1924. The marine ornithology of the Cape Verde Islands, with a list of all the birds of the archipelago. Bull. Am. Mus. nat. Hist., 50: 211-278.
- Neumann, O., 1908. A revision of the genus Calamocichla Sharpe. Novit. zool., 15: 244-252.
- Rhoades, R., 1952. A list of birds from the Cape Verde Islands collected by the Blossom South Atlantic Expedition and catalogued in the Cleveland Museum of Natural History: 1–35 (unpublished typescript, copy held at the Edward Grey Institute of Field Ornithology, Oxford).
- Sclater, W.L., 1927. On the genus Calamocichla. Bull. Br. Orn. Club., 47: 118-119.
- Sclater, W.L., 1936. Calamoecetor gen. nom. nov., for Calamornis, preoccupied. Bull. Br. Orn. Club, 57: 22.
- Sharpe, R.B., 1883. Catalogue of the birds in the British

Museum, 7. Catalogue of the Passeriformes or perching birds, in the collection of the British Museum, Cichlomorphae, IV: i-xvi, 1-698, pls. I-XV (Trustees of the British Museum, London).

- Sharpe, R.B., 1906. Birds. In: The history of the collections contained in the Natural History Departments of the British Museum, 2. Separate historical accounts of the several collections included in the Department of Zoology: 79-515 (Trustees of the British Museum, London).
- Shelley, G.E., 1896. Birds of Africa, 1: i-viii, 1-196 (R.H. Porter, London).
- Warren, R.L.M. & C.J.O. Harrison, 1971. Type-specimens of birds in the British Museum (Natural History), 2. Passerines: i-vi, 1-628 (Trustees of the British Museum (Natural History), London).
- Watson, G.E., M.A. Traylor & E. Mayr, 1986. Family Sylviidae. In: E. Mayr & G.W. Cottrell (eds.), [Peters'] Check-list of birds of the world, 11: 3-294 (Museum of Comparative Zoology, Cambridge, Mass.).
- White, C.M.N., 1952. The status of the genus Calamocichla. Ibis, 94: 685-686.
- Wolters, H.E., 1980. Die Vogelarten der Erde, 5: 321-400 (Paul Parey, Hamburg/Berlin).

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