

FURTHER BREEDING RECORDS FOR BIRDS (AVES) IN ANGOLA

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Dean, W.R.J., Franke, U., Joseph, G., Gonçalves, F.M., Mills, M.S.L., Milton, S.J., Monadjem, A. & Oschadleus, H.D. 2013. Further breeding records for birds (Aves) in Angola. *Durban Natural Science Museum Novitates* 36: 1–10. Some details of records of nests, eggs and nestlings of 167 (possibly 168) species in the bird collection at Lubango, Angola are given. This includes 23 species for which there were no Angolan breeding records at all, and one possibly new breeding species (Slaty Egret). The data also confirm the breeding of another 20 species strongly suspected of breeding in Angola, but that lacked egg or nestling records.

KEYWORDS: Angola, birds, museum collections, breeding.

INTRODUCTION

One of the gaps in our knowledge of the natural history of birds in Angola concerns breeding and breeding seasons. Pinto (1983) summarized breeding data from the Lubango bird collection, but often without locality or clutch details. Some of the data from both Pinto's (1983) book and from the Lubango bird collection were included in species accounts by Dean (2000). Subsequently, detailed data, mostly gleaned from museum specimens, have been published (Dean et al. 2002, 2003, Dean & Milton 2007), but the overall picture of breeding seasons in Angola is far from complete. Given that more than 830 species (of ca. 970 species) are likely to breed in Angola, and the published records cover less than one quarter of these species, it is of interest to present further breeding records, many of which are 'new'.

In June 2008, a team comprising the authors, spent two weeks capturing the data from the extensive bird collection at Lubango, Angola (Mills et al. 2010). The collection is currently under the supervision of the Instituto Superior de Ciências da Educação (ISCED) and is accessible, with permission and prior arrangement, to any students or researchers interested in Angolan birds. This collection, assembled under the leadership of Dr A.A. Rosa Pinto from 1958 to the start of the civil war in 1974, contains more than 36 000 specimens, and includes nestlings, eggs and nests, as well as study skins and mounted birds.

During the course of extracting and capturing data from the skin collection, we noted age (nestling, juvenile, immature, adult) for each species. We also captured the data from the nest and egg collection, and from the collection of nestlings preserved in alcohol. We discarded the data for nests without corresponding eggs or nestlings because the nests could have been misidentified, or collected before or after use.

SYSTEMATIC LIST

Taxonomy and order follows Gill & Donsker (2014). Accession numbers for specimens are in square brackets preceding the record. Missing accession numbers are indicated by an asterisk. Localities are listed with co-ordinates in Appendix 1.

Anatidae

White-backed Duck *Thalassornis leuconotus*

[22028] 1y, 29 Feb. 1968, Lagoa Nuntechite (= Nautelita); [598] c/1, 25 Jun. 1974, Lagoa Iventala; [596] c/1, 29 May 1974, Lagoa Iventala; [595] c/1, 29 May 1974, Lagoa Iventala.

Spur-winged Goose *Plectropterus gambensis*

[509] c/1, 5 Apr. 1970, Quiteve.

Egyptian Goose *Alopochen aegyptiaca*

[321] c/7, 24 Jun. 1968, Quiteve.

Southern Pochard *Netta erythrophthalma*

[473] c/8, 16 Apr. 1970, Lagoa Nuntechite.

Phasianidae

Coqui Francolin *Peliperdix coqui*

[*] c/2, 10 Jan. 1966, Humpata; [339] c/1, 16 Sept. 1968, Capelongo; [30682] 1y, 4 Nov. 1969, Chão da Chela

Orange River Francolin *Scleroptila gutturalis*

[420] c/4, 5 Dec 1969, Calunda.

Crested Francolin *Dendroperdix sephaena*

[125] c/1, 7 Dec 1965, Virute.

Scaly Francolin *Pternistis squamatus*

[410] c/2, 9 Sept. 1969, Condé.

Red-billed Spurfowl *Pternistis adspersus*

[22189] 3y, 8 Apr. 1968, Catequero; [312] c/6, 8 May 1968, Chicusse; [314] c/4, 27 May 1968, Mucope; [315] c/3, 29 May 1968, Mucope; [23098] 4y, 2 Jun. 1968, Mucope; [328] c/1, 1 Jul. 1968, Xangongo (= Roçadas); [32292] 1y, 21 Jul. 1970, Humbe.

Red-necked Spurfowl *Pternistis afer*

[56] c/1, 23 Apr. 1965, Omupanda (= Nompaca R.); [11111] 1y, 25 Apr. 1965, Humpata; [71] c/6, 29 Apr. 1965, Omupanda (= Mupanda); [393] c/1, 6 May 1969, Lagoa Nuntechite; [508] c/1, 26 Mar. 1971, Pirangombe; [574] c/4, 1 May 1974, Mungondo.

Podicipedidae**Little Grebe** *Tachybaptus ruficollis*

[21694] 1y, 19 Feb. 1968, Montipa. Very small chick, probably from an egg laid mid-Jan.

Threskiornithidae**African Sacred Ibis** *Threskiornis aethiopicus*

[320] c/1, 24 Jun. 1968, Quiteve; [23529] 1y, 27 Jun. 1968, Quiteve; [434] c/2, 6 Apr. 1970, Quiteve; [441] c/3, 6 Apr. 1970, Quiteve; [435] c/2, 6 Apr. 1970, Quiteve.

Glossy Ibis *Plegadis falcinellus*

[23548] 2y, 27 Jun. 1968, Quiteve.

African Spoonbill *Platalea alba*

All records from Quiteve: [326] c/1, 27 Jun. 1968; [317] c/3, 24 Jun. 1968; [318] c/4, 24 Jun. 1968; [319] c/2, 24 Jun. 1968; [23553] 1y, 27 Jun. 1968; [23558] 1y, 27 Jun. 1968.

Ardeidae**Black-crowned Night Heron** *Nycticorax nycticorax*

All records from Quiteve: [23446] 1y, 24 Jun. 1968; [23555] 1y, 27 Jun. 1968; [465] c/3, 8 Apr. 1970; [467] c/3, 8 Apr. 1970; [442] c/4, 7 Apr. 1970; [443] c/2, 7 Apr. 1970.

Striated Heron *Butorides striata*

[559] c/2, 7 Oct. 1972, Cachingues.

Squacco Heron *Ardeola ralloides*

All records from Quiteve: [23534] 1y, 27 Jun. 1968; [452] c/4, 8 Apr. 1970; [453] c/3, 8 Apr. 1970; [454] c/4, 8 Apr. 1970; [455] c/4, 8 Apr. 1970; [450] c/3, 7 Apr. 1970; [451] c/4, 8 Apr. 1970; [449] c/3, 8 Apr. 1970.

Rufous-bellied Heron *Ardeola rufiventris*

All records from Lagoa Nuntechite: [381] c/4, 27 Apr. 1969; [382] c/3, 27 Apr. 1969; [383] c/1, 27 Apr. 1969; [384] c/3, 27 Apr. 1969; [385] c/2, 27 Apr. 1969; [386] c/2, 27 Apr. 1969; [400] c/3, 9 May 1969; [401] c/3, 9 May 1969.

Grey Heron *Ardea cinerea*

[510] c/1, no date, Quiteve.

Purple Heron *Ardea purpurea*

[400] c/2, 8 Apr. 1970, Quiteve; [468] c/3, 8 Apr. 1970, Quiteve.

Great Egret *Ardea alba*

[472] c/1, 8 Apr. 1970, Quiteve; [444] c/2, 7 Apr. 1970, Quiteve.

Intermediate Egret *Egretta intermedia*

All records except one from Lagoa Nuntechite: [229] 2y, 28 Apr. 1969; [387] c/2, 27 Apr. 1969; [388] c/2, 27 Apr. 1969; [389] c/3, 28 Apr. 1969; [27430] 2y, 28 Apr. 1969; [399] c/2, 9 May 1969; [23525] 3y, 27 Jun. 1968, Quiteve.

Black Heron *Egretta ardesiaca*

All records from Quiteve: [463] c/3, 8 Apr. 1970; [464] c/3, 8 Apr. 1970; [439] c/3, 6 Apr. 1970; [440] c/4, 5 Apr. 1970.

Slaty Egret *Egretta vinaceigula*

At least four of the specimens labelled Black Heron in the Lubango collection were misidentified and are Slaty Egrets (Mills et al. 2010). Three nestlings of "Black Heron" were collected on 27 June 1968, and an immature female Slaty Egret was collected on the same day at the same locality. It is almost certain that these "Black Heron" nestlings are in fact misidentified Slaty Egrets. However, they were preserved as "wet" specimens (in ethyl alcohol) and it will be difficult, without making the specimens into study skins, to get a positive identification. Dean (2000) had no records of Slaty Egret occurring in Angola.]

Little Egret *Egretta garzetta*

All records from Quiteve: [445] c/3, 7 Apr. 1970; [448] c/4, 7 Apr. 1970; [446] c/3, 7 Apr. 1970; [447] c/4, 7 Apr. 1970.

Scopidae**Hamerkop** *Scopus umbretta*

[244] c/3, 14 Jun. 1966, Longa.

Phalacrocoracidae**Reed Cormorant** *Microcarbo africanus*

All records, except where noted from Quiteve: [322] c/4, 27 Jun. 1968; [323] c/4, 27 Jun. 1968; [324] c/3, 27 Jun. 1968; [325] c/2, 27 Jun. 1968; [23528] 5y, 27 Jun. 1968; [456] c/3, 8 Apr. 1970; [457] c/4, 8 Apr. 1970; [458] c/4, 8 Apr. 1970; [459] c/3, 8 Apr. 1970; [460] c/4, 8 Apr. 1970; [461] c/4, 8 Apr. 1970. All the following records from Lagoa Iventala: [597] c/3, 18 Jun. 1974; [587] c/4, 22 May 1974; [588] c/1, 29 May 1974; [590] c/4, 29 May 1974.

African Darter *Anhinga rufa*

All records from Quiteve: [23542] 1y, 23 Jun. 1968; [23551] 2y, 23 Jun. 1968; [23357] 2y, 27 Jun. 1968; [436] c/2, 6 Apr. 1970; [438] c/3, 6 Apr. 1970.

Accipitridae**Black-winged Kite** *Elanus caeruleus*

[594] c/4, 29 May 1974, Lagoa Iventala. Pinto (1983) and Dean (2000) had no egg records.

Wahlberg's Eagle *Hieraetus wahlbergi*

[348] c/1, 26 Sept. 1968, Capelongo.

Lizard Buzzard *Kaupifalco monogrammicus*

[567] c/2, 13 Nov. 1972, Missão do Chillesso (= Missão do Andulo); [561] c/1, 14 Oct. 1972, Chicala. Pinto (1983) and Dean (2000) had no egg records.

Dark Chanting Goshawk *Melierax metabates*

[566] c/2, 3 Oct. 1972, Chitembo.

Shikra *Accipiter badius*

[526] c/3, 13 Oct. 1971, Dolondolo (Capira).

African Fish Eagle *Haliaeetus vocifer*

[437] c/2, 6 Apr. 1970, Quiteve.

Otididae**Red-crested Korhaan** *Lophotis ruficrista*

[421] c/1, 5 Dec 1969, Calunda.

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Rallidae**African Swamphen** *Porphyrio madagascariensis*

[45] c/2, 25 Nov. 1969, Inamangondo

Common Moorhen *Gallinula chloropus*

All records from Lagoa Iventala: [600] c/3, 25 Jun. 1974; [585] c/3, 22 May 1974; [586] c/1, 22 May 1974. First breeding record for Angola (Pinto 1983, Dean 2000).

Red-knobbed Coot *Fulica cristata*

[591] c/3, 22 May 1974, Lagoa Iventala. Date given as June in Pinto (1983).

Recurvirostridae**Black-winged Stilt** *Himantopus himantopus*

[3659] 4y, 14 Jun. 1961, Morro dos Veados (at Luanda town) (Pinto 1983).

Charadriidae**Blacksmith Lapwing** *Vanellus armatus*

[23702] 2y, 2 Jul. 1968, Lagoa Poco (Quiteve); [316] c/1, 1 Jun. 1968, Xangongo (= Roçadas); [23625] 3y, 29 Jun. 1968, Lagoa Maquete; [579] c/3, 5 May 1974, Mungondo.

Crowned Lapwing *Vanellus coronatus*

[13737] 1y, 28 Oct. 1965, Chitado.

African Wattled Lapwing *Vanellus senegallus*

[361] c/2, 24 Oct. 1968, Missão Católica de Sangueve; [517] c/3, 31 Aug. 1971, Cariango; [37074] 2y, 25 Oct. 1972, Cachingues.

Kittlitz's Plover *Charadrius pecuarius*

[9] c/1, 17 Aug. 1964, Goma.

Jacanidae**African Jacana** *Actophilornis africanus*

[536] c/4, 31 Jul. 1972, Acampamento da Caua (Pinto 1983).

Glareolidae**Bronze-winged Courser** *Rhinoptilus chalcopterus*

[108] c/3, 2 Sept. 1965, Cangandala (village) (Pinto 1983).

Collared Pratincole *Glareola pratincola*

[537] c/1, 24 Aug. 1972, Bom Jesus (Pinto 1983)

Laridae**African Skimmer** *Rynchops flavirostris*

[484] c/3, 20 Jun. 1970, Quiteve; [485] c/1, 20 Jun. 1970, Quiteve; [486] c/1, 20 Jun. 1970, Quiteve.

Pteroclidae**Namaqua Sandgrouse** *Pterocles namaqua*

[11] c/3, 23 Aug. 1964, Calai; [242] c/4, 11 May 1966, Mão de Octávio de Matos.

Double-banded Sandgrouse *Pterocles bicinctus*

[527] c/3, 16 Oct. 1971, Dolondolo (Capira). Dean (2000) had one egg record.

Burchell's Sandgrouse *Pterocles burchelli*

[10] c/1, 22 Aug. 1964, Goma.

Columbidae**Mourning Collared Dove** *Streptopelia decipiens*

[327] c/2, 5 Jul. 1968, Quiteve.

Red-eyed Dove *Streptopelia semitorquata*

[54] 2y, 27 Apr. 1965, Chibia; [65] c/2, 27 Apr. 1965, Chibia; [52] c/2, 23 Apr. 1965, Omupanda (= Nompaca R.); [12563] 2y, 20 Aug. 1965, Cacungun; [11325] 2y, 20 May 1965, Omupanda (= Mupanda); [11326] 1y, 20 May 1965, Omupanda (= Mupanda); [11381] 2y, 31 May 1965, Tchiamenha; [85] c/1, 13 May 1965, Humpata; [13241] 1y, 6 Oct. 1965, Quilemba; [245] c/1, 23 Jun. 1966, Cuito-Cuanavale; [480] c/

Cuculidae**Levaillant's Cuckoo** *Clamator levaillantii*

[523] c/1, 14 Sept. 1971, Mussende. Presumably an oviductal egg. No host is listed on the label.

Diederik Cuckoo *Chrysococcyx caprius*

[1788] 1y, 14 Jun. 1960, Fazenda Boa Esperança; [1789] 1y, 14 Jun. 1960, Fazenda Boa Esperança; [1790] 1y, 14 Jun. 1960, Fazenda Boa Esperança; [1791] 1y, 14 Jun. 1960, Fazenda Boa Esperança; [3287] 1y, 29 Mar. 1961, Fazenda Boa Esperança; [259] c/1, 5 Dec 1966, Bumbo; [15202] 1y, 25 Feb. 1966, Dongue. No hosts are listed on labels.

Klaas's Cuckoo *Chrysococcyx klaas*

[519] c/1, 7 Sept. 1971, Cariango. Presumably an oviductal egg. No host is listed on the label.

Strigidae**Southern White-faced Owl** *Ptilopsis granti*

[34168] 3y, 20 Jul. 1971, Quissongo. Pinto (1983) listed only a "breeding condition" record at Calulo. Dean (2000) had no breeding records.

Marsh Owl *Asio capensis*

[398] c/3, 9 May 1969, Lagoa Nuntechite; [475] c/1, 25 Apr. 1970, Lagoa Nuntechite; [39049] 2y, 18 Jun. 1974, Lagoa Iventala.

Caprimulgidae**Fiery-necked Nightjar** *Caprimulgus pectoralis*

[*] c/1, 13 Aug. 1965, Cangandala (village); [358] c/1, 19 Oct. 1968, Missão Católica de Sangueve.

Pennant-winged Nightjar *Caprimulgus vexillarius*

[25846] 2y, 19 Oct. 1968, Missão Católica de Sangueve; [518] c/2, 1 Sept. 1971, Mussende; [960] c/1, 14 Sept. 1971, Mussende; [540] c/1, 31 Aug. 1972, Cangandala (village); [546] c/2, 3 Oct. 1972, Cachingues; [549] c/2, 5 Oct. 1972, Cachingues; [550] c/1, 1 Oct. 1972, Cachingues.

Apodidae**African Palm Swift** *Cypsiurus parvus*

All records, except where noted from Missão do Munhino: [182] 1y, 7 Feb. 1968; [183] 1e + 1y, 7 Feb. 1968; [184] 2y, 7 Feb. 1968; [185] 1y, 7 Feb. 1968; [186] 2y, 7 Feb. 1968; [187] 2y, 7 Feb. 1968; [283] c/1, 7 Feb. 1968; [284] c/2, 7 Feb. 1968; [262] c/1, 7 Feb. 1968. All the following records from Lubango: [506] c/3, 8 Feb. 1971; [499] c/2, 30 Jan. 1971; [500] c/1, 15 Jan. 1971; [270] 2y, 10 Sept. 1971; Pinto (1983) gives a number of breeding records without details.

Little Swift *Apus affinis*

[3655] 1y, 14 Jun. 1961, Luanda (town); [202] 2y, 7 Sept. 1968, Micossi (Micossé); [343] c/2, 17 Sept. 1968, Micossi (Micossé); [340] c/3, 17 Sept. 1968, Micossi (Micossé); [341] c/3, 17 Sept. 1968, Micossi (Micossé); [342] c/2, 17 Sept. 1968, Micossi (Micossé); [530] c/3, Jan. 1972, Rio Cubango; [531] c/3, Jan. 1972, Rio Cubango; [532] c/2, Jan. 1972, Rio Cubango; [529] c/3, Jan. 1972, Rio Cubango; [541] c/2 30 Sept. 1972, Chicala. Pinto (1983) gives some breeding records without details.

White-rumped Swift *Apus caffer*

[22136] 4y, 4 Apr. 1968, Tundavala; [213] 3y, 22 Oct. 1968,

Missão Católica de Sangueve; [359] c/3, 22 Oct. 1968, Missão Católica de Sangueve; [344] c/2, 19 Sept. 1968, Guengue. Pinto (1983) gives some breeding records without details.

Coliidae**Red-backed Mousebird** *Colius castanotus*

[217] 2y, 22 Apr. 1969, Montipa; [27422] 2y, 22 Apr. 1969; Montipa; [494] c/4, 3 Dec 1970, Quilengues.

Red-faced Mousebird *Urocolius indicus*

[3301] 1y, 3 Apr. 1961, Luanda (town); [228] 3y, 29 Apr. 1969, Huíla (town); [391] c/3, 29 Apr. 1969, Huíla (town). Pinto (1983) and Dean (2000) had no egg records for this species, but subsequently Dean et al. (2003) and Dean & Milton (2007) listed records of eggs of this species collected by Dr W.J. Ansorge.

Alcedinidae**Grey-headed Kingfisher** *Halcyon leucocephala*

[539] c/3, 28 Aug. 1972, Culamagia.

Brown-hooded Kingfisher *Halcyon albiventris*

[36478] 3y, 10 Oct. 1972, Missão de Mizenze.

Striped Kingfisher *Halcyon chelicuti*

[257] c/3, 7 Nov. 1966, Toco. This record is in Pinto (1983) without locality.

Woodland Kingfisher *Halcyon senegalensis*

[285] c/1, 8 Feb. 1968, Montipa; [21547] 2y, 8 Feb. 1968, Montipa.

Meropidae**Swallow-tailed Bee-eater** *Merops hirundineus*

[349] c/4, 26 Sept. 1968, Capelongo. Only an oviductal egg for this species listed by Dean (2000).

Little Bee-eater *Merops pusillus*

[354] c/4, 3 Oct. 1968, Matala.

White-fronted Bee-eater *Merops bullockoides*

[18477] 4y, 11 Oct. 1966, Quilemba; [36388] 4y, 7 Oct. 1972, Cachingues; [36392] 4y, 7 Oct. 1972, Cachingues; [36401] 4y, 7 Oct. 1972, Cachingues.

Phoeniculidae**Green Wood Hoopoe** *Phoeniculus purpureus*

[488] c/5, 27 Sept. 1970, Omupanda (= Nompaca R.).

Lybiidae**Anchieta's Barbet** *Stactolaema anchietae*

[25920] 3y, 21 Oct. 1968, Gogué; [36289] 5y, 5 Oct. 1972, Cachingues.

Yellow-fronted Tinkerbird *Pogoniulus chrysoconus*

[22372] 3y, 6 May 1968, Quihita.

White-headed Barbet *Lybius leucocephalus*

[525] c/4, 30 Sept. 1971, Humpata.

Crested Barbet *Trachyphonus vaillantii*

[32518] 4y, 30 Oct. 1970, Tundavala.

Indicatoridae**Greater Honeyguide** *Indicator indicator*

[350] c/1, 27 Sept. 1968, Muquequete. Presumably an oviductal egg. No host listed on the label.

Picidae**Bearded Woodpecker** *Dendropicos namaquus*

[513] c/3, 25 Aug. 1971, Mussende.

Psittacidae**Rosy-faced Lovebird** *Agapornis roseicollis*

[390] c/4, 20 Apr. 1969, Humbe; [406] c/4, Jul. 1969, Ondjiva; [479] c/1, 9 May 1970, Lubango. Pinto (1983) listed one record, c/4 at Ondjiva, July, presumably 406 above.

Meyer's Parrot *Poicephalus meyeri*
[478] c/2, 3 May 1970, Cangolo.**Platysteiridae****Chinspot Batis** *Batis molitor*

[168] c/1, 15 Feb. 1966, Ponta da Lubango.

White-tailed Shrike *Lanioturdus torquatus*

[5309] 3y, 24 Oct. 1963, Fazenda da Cacanda

Black-throated Wattle-eye *Platysteira peltata*
[368] c/2, 19 Oct. 1968, Uige (town).**Prionopidae****White-crested Helmetshrike** *Prionops plumatus*

[345] c/3, 25 Sept. 1965, Castanheira de Pêra; [338] c/4, 15 Sept. 1968, Muquequete.

Retz's Helmetshrike *Prionops retzii*
[307] c/3, 1 Apr. 1968, Nongombe**Malaconotidae****Orange-breasted Bushshrike** *Chlorophoneus sulfureopectus*

[144] c/1, 13 Jan. 1966, Omupanda (= Nompaca R.); [255] c/2, 24 Oct. 1966, Cascata da Huíla (Unguéría). First breeding record for Angola (Dean 2000).

Brown-crowned Tchagra *Tchagra australis*

[169] c/1, 15 Feb. 1966, Ponta da Lubango; [15404] 1y, 18 Mar. 1966, Cristo Rei; [254] c/1, 17 Oct. 1966, Huíla (town); [493] c/2, 9 Nov. 1970, Tundavala.

Black-crowned Tchagra *Tchagra senegalus*

[100] c/2, 18 Aug. 1965, Rio Maubi; [14594] 2y, 12 Dec 1965, Tchivinguiro; [163] c/1, 9 Feb. 1966, Lubango.

Swamp Boubou *Laniarius bicolor*

[351] c/1, 29 Sept. 1968, Matala. First breeding record for Angola (Dean 2000).

Crimson-breasted Shrike *Laniarius atrococcineus*

[253] c/2, 17 Oct. 1966, Huíla (town); [264] c/2, 1 Feb. 1971, Mucope; [503] c/2, 1 Feb. 1971, Mucope. Dean (2000) had no egg records.

Laniidae**Southern White-crowned Shrike** *Eurocephalus anguitimens*

[32600] 3y, 3 Dec 1970, Capunda-Cavilongo (= Picada de Olivença a Nova). Dean (2000) had only a nest building record.

Southern Fiscal *Lanius collaris*

[6] c/2, 10 Sept. 1963, Huíla (town); [4945] 2y, 10 Sept. 1963, Huíla (town); [14248] 3y, 29 Nov. 1965, Palanca; [134] c/3, 10 Oct. 1965, Lubango; [13234] 4y, 6 Oct. 1965, Quilemba; [13253] 1y, 10 Oct. 1965, Lubango; [13254] 1y, 10 Oct. 1965, Lubango; [13255] 1y, 10 Oct. 1965, Lubango; [251] c/3, 10 Oct. 1966, Lubango; [247] c/3, 7 Sept. 1966, Lubango, 16 km north.

Oriolidae**African Golden Oriole** *Oriolus auratus*[111] c/2, 30 Sept. 1965, Omupanda (= Nompaca R.). Dean (2000) had only an oviductal egg record.
Black-headed Oriole *Oriolus larvatus*
[105] c/1, 22 Aug. 1965, Culamagia; [110] c/3, 30 Sept. 1965, Omupanda (= Nompaca R.); [363] c/2, 23 Oct. 1968, Tápuia, Chipindo; [492] c/2, 7 Nov. 1970, Tundavala. Dean (2000) had no egg records.**Dicruridae****Square-tailed Drongo** *Dicrurus ludwigii*

[214] 3y, 26 Dec 1968, Chipindo. First breeding record for Angola (Dean 2000).

Fork-tailed Drongo *Dicrurus adsimilis*

[12945] 2y, 31 Aug. 1965, Culamagia; [115] c/1, 13 Nov. 1965, Tchivinguiro; [118] c/3, 20 Nov. 1965, Eica; [13805] 2y, 13 Nov. 1965, Uncondo; [249] c/3, 19 Sept. 1966, Mucanca; [362] c/2, 26 Oct. 1968, Chipindo (= Tandala); [512] c/2, 19 Aug. 1971, Mussende; [538] c/3, 27 Aug. 1972, Culamagia; [36188] 3y, 3 Oct. 1972, Cachingues, 18 km S.

Monarchidae**African Paradise Flycatcher** *Terpsiphone viridis*

[10881] 1y, 31 Mar. 1965, Chão da Chela; [562] c/1, 16 Oct. 1972, Cachingues.

Alaudidae

1y, 3 Dec 1970, Quilengues; [495] c/1, 3 Dec 1970, Quilengues.

Yellow-bellied Greenbul *Chlorocichla flaviventris*
 [194] 1y, 19 Feb. 1968, Montipa; [195] 2y, 4 Mar. 1968, Rio da Areia; [299] c/2, 4 Mar. 1968, Rio da Areia; [216] 2y, 17 Apr. 1969, Chibia; [219] 2y, 22 Apr. 1969, Montipa; [372] c/1, 22 Apr. 1969, Montipa; [373] c/1, 22 Apr. 1969, Montipa; [27416] 2y, 17 Apr. 1969, Chibia; [27426] 2y, 22 Apr. 1969, Montipa; [239] 1y, 12 Jan. 1971, Quilemba; [3360] 2y, 12 Jan. 1971, Quilemba; [266] 2y, 24 Mar. 1971, Pirangombe; [578] c/1, 5 May 1974, Mungolo. Dean (2000) had no definite breeding records for this species. Subsequently Dean et al. (2003) listed one record without date, but details provided later by Dean & Milton (2007).

Terrestrial Brownbul *Phyllastrephus terrestris*
 [79] c/1, 3 May 1965, Lubango, 16 km north; [181] 1e + 1y, 26 Jan. 1968, Tundavala; [21420] 1y, 25 Jan. 1968, Rio Mutuco; [27432] 2y, 29 Apr. 1969, Huila (town). Dean (2000) had no egg records.

Pale-olive Greenbul *Phyllastrephus fulviventer*
 [27424] 2y, 22 Apr. 1969, Montipa; [497] c/1, 3 Dec 1970, Quilengues. First definite breeding record for Angola (Dean 2000).

Hirundinidae

Lesser Striped Swallow *Cecropis abyssinica*
 [282] 2y, 30 Sept. 1972, Chicala; [542] c/3, 30 Sept. 1972, Chicala. Dean (2000) had no egg records.

Red-throated Cliff Swallow *Petrochelidon rufigula*
 [330] c/1, 9 Sept. 1968, Guengue; [331] c/2, 9 Sept. 1968, Guengue; [332] c/2, 9 Sept. 1968, Guengue; [333] c/2, 9 Sept. 1968, Guengue; [334] c/2, 9 Sept. 1968, Guengue; [335] c/1, 9 Sept. 1968, Guengue; [336] c/2, 9 Sept. 1968, Guengue; [534] c/2, 22 Jul. 1972, Quibala; [535] c/3, 22 Jul. 1972, Quibala; [568] c/2, 30 Nov. 1972, Rio Cuando (= Nova Moncao); [601] c/3, 4 Aug. 1974, Mt Soque; [602] c/3, 4 Aug. 1974, Mt Soque.

Acrocephalidae

Lesser Swamp Warbler *Acrocephalus gracilirostris*
 [470] c/2, 8 Apr. 1970, Quiteve; [471] c/1, 8 Apr. 1970, Quiteve; [462] c/3, 8 Apr. 1970, Quiteve; [469] c/3, 8 Apr. 1970, Quiteve. First breeding records for Angola (Dean 2000).

Cisticolidae

Rattling Cisticola *Cisticola chiniana*
 [129] c/3, 12 Dec 1965, Tchivinguiro; [131] c/3, 15 Dec 1965, Tchivinguiro; [260] c/2, 19 Dec 1966, Quipungo; [258] c/2, 14 Nov. 1966, Tundavala; [270] c/3, 12 Mar. 1967, Lubango; [21660] 2y, 15 Feb. 1968, Fazenda da Leba; [570] c/4, 2 Mar. 1973, Lubango.

Tinkling Cisticola *Cisticola rufilatus*
 [135] c/1, 10 Jan. 1966, Humpata.

Wailing Cisticola *Cisticola lais*
 [157] c/3, 31 Jan. 1965, Tundavala; [178] c/3, 18 Feb. 1966, Tundavala; [136] c/3, 10 Jan. 1966, Humpata. Dean (2000) had only one egg record.

Chirping Cisticola *Cisticola pipiens*
 [547] c/4, 3 Oct. 1972, Cachingues.

Levaillant's Cisticola *Cisticola tinniens*
 [357] c/3, 17 Oct. 1968, Chipindo.

Short-winged Cisticola *Cisticola brachypterus*
 [205] c/3, 21 Mar. 1966, Lubango; [256] c/3, 2 Nov. 1966, Quilemba.

Neddicky

Cisticola fulvicapilla
 [179] c/4, 20 Feb. 1966, Capunda-Cavilongo; [196] c/3, 7 Mar. 1966, Lubango, 16 km north; [250] c/3, 28 Sept. 1966, Mucanca; [269] c/3, 10 Mar. 1967, Lubango; [310] c/2, 5 Apr. 1968, Lubango, 16 km north.

Zitting Cisticola

Cisticola juncidis
 [127] c/3, 9 Dec 1965, Tchivinguiro; [128] c/2, 10 Dec 1965, Tchivinguiro; [313] c/1, 14 May 1968, Chite. Dean (2000) had no egg records.

Wing-snapping Cisticola

Cisticola ayresii
 [133] c/3, 17 Dec 1965, Humpata.

Tawny-flanked Prinia

Prinia subflava
 [15] c/3, 10 Apr. 1965, Omupanda (= Nompaca R.); [183] c/3, 29 Nov. 1965, Palanca; [209] c/3, 25 Mar. 1966, Omupanda; [210] c/1, 25 Mar. 1966, Omupanda; [15430] 2y, 25 May 1966, Omupanda; [428] c/2, 29 Mar. 1970, Cangolo.

Black-chested Prinia

Prinia flavicans
 [23] c/3, 12 Apr. 1965, Omupanda (= Nompaca R.). Dean (2000) had no definite breeding records for this species, but subsequently egg records were given by Dean & Milton (2007).

Grey-backed Camaroptera

Camaroptera brevicaudata
 [12] c/3, 29 Mar. 1965, Chibia; [502] c/2, 1 Feb. 1971, Mucope; [544] c/2, 1 Oct. 1972, Cachingues. First breeding record for Angola (Dean 2000).

Green-capped Eremomela

Eremomela scotops
 [1] Nest that apparently had 2y, 7 Nov. 1960, Bocoio. First breeding record for Angola (Dean 2000).

Pellorneidae

Brown Illadopsis *Illadopsis fulvescens*
 [34511] 1y, 2 Aug. 1971, Cabuta. Traylor (1963) listed a record of a juvenile at Calandula; this record repeated in Dean (2000).

Leiothrichidae

Black-faced Babbler *Turdoides melanops*
 [505] c/2, 2 Feb. 1971, Melunga.

Arrow-marked Babbler *Turdoides jardineii*
 [303] c/1, 18 Mar. 1968, Mucanca; [306] c/2, 28 Mar. 1968, Lagoa Nuntechite; [569] c/3, 18 Feb. 1973, Cangolo.

Hartlaub's Babbler *Turdoides hartlaubii*

[28] c/3, 14 Apr. 1965, Lubango; [124] c/3, 7 Dec 1965, Virute; [62] 1e + 1y, 12 May 1965, Lubango; [82] c/1, 12 May 1965, Lubango; [11265] 2y, 12 May 1965, Lubango, 16 km S; [223] c/3, 1 Apr. 1966, Mucanca; [15491] 1y, 6 Apr. 1966, Mucanca; [192] c/2, 3 Mar. 1966, Humpata; [203] c/1, 21 Mar. 1966, Lubango; [204] c/1, 21 Mar. 1966, Lubango; [524] c/2, 30 Sept. 1971, Humpata; [571] c/4, 17 Apr. 1974, Chibia.

Bare-cheeked Babbler *Turdoides gymnogenys*
 [528] c/3, 22 Oct. 1971, Serra da Neve. First breeding record for Angola (Dean 2000).

Sturnidae

Greater Blue-eared Starling *Lamprotornis chalybaeus*
 [352] c/4, 2 Oct. 1968, Cutenda. First breeding record for Angola (Dean 2000).

Violet-backed Starling *Cinnyricinclus leucogaster*

[109] c/1, 30 Sept. 1965, Omupanda (= Nompaca R.).

Turdidae

Kurrichane Thrush *Turdus libonyana*
 [3563] c/3, 7 Nov. 1970, Tundavala.

Muscicapidae

Miombo Scrub Robin *Cercotrichas barbata*
 [265] 3y, 3 Oct. 1972, Missão de Mizenze; [545] c/1, 20 Oct. 1972, Chitembo.

White-browed Scrub Robin *Cercotrichas leucophrys*

[145] c/2, 17 Jan. 1966, Tundavala; [489] c/3, 31 Oct. 1970, Tundavala.

Southern Black Flycatcher *Melaenornis pammelaina*

[102] c/1, 21 Aug. 1965, Cangandala (village); [347] c/1, 26 Sept. 1968, Capelongo; [35496] 1y, 11 Sept. 1971, Mussende; [543] c/2, 30 Sept. 1972, Chicala.

Pale Flycatcher *Melaenornis pallidus*

[152] 2y, 19 Sept. 1966, Mucanca; [248] c/2, 7 Sept. 1966, Lubango, 16 km north.

Ashy Flycatcher *Muscicapa caerulescens*

[548] c/3, 5 Oct. 1972, Cachingues. Dean (2000) had no egg records.

White-browed Robin-Chat *Cossypha heuglini*

[6795] 1y, 30 Mar. 1964, Huila (town); [*] c/1, 29 Aug. 1965, Cangandala (village); [32522] 3y, 30 Oct. 1970, Tundavala.

Rufous-tailed Palm Thrush *Cichladusa ruficauda*

[85] c/1, 8 Dec 1965, Viavala; [604] c/3, 26 Sept. 1974, Canjala (Egito).

Arnot's Chat *Myrmecocichla arnotti*

[92] 3y, 16 Dec 1965, Dundualundo; [132] c/1, 16 Dec 1965, Dundualundo; [14736] 2y, 16 Dec 1965, Dundualundo; [14744] 1y, 16 Dec 1965, Dundualundo; [14747] 1y, 16 Dec 1965, Dundualundo.

Nectariniidae

Carmelite Sunbird *Chalcomitra fuliginosa*

[32584] 2y, 20 Nov. 1970, Conda. First breeding record for Angola (Dean 2000).

Amethyst Sunbird *Chalcomitra amethystina*

[224] c/2, 1 Apr. 1966, Mucanca; [262] c/1, 23 Dec 1966, Tundavala; [180] c/2, 20 Feb. 1966, Capunda-Cavilongo; [15224] 1y, 25 Feb. 1966, Rio da Areia.

Scarlet-chested Sunbird *Chalcomitra senegalensis*

[606] c/1, 24 Nov. 1971, Cahama.

Olive-bellied Sunbird *Cinnyris chloropygius*

[412] c/2, 12 Sept. 1969, Caongo (= Lândana).

Ludwig's Double-collared Sunbird *Cinnyris ludovicensis*

[293] c/1, 15 Feb. 1968, Leba. First breeding record for Angola (Dean 2000).

Purple-banded Sunbird *Cinnyris bifasciatus*

[418] c/2, 5 Dec 1969, Calunda; [419] c/2, 5 Dec 1969, Calunda; [427] c/2, 8 Dec 1969, Carunjamba; [411] c/2, 2 Sept. 1969, Caongo (= Lândana).

White-bellied Sunbird *Cinnyris talatala*

[156] c/1, 27 Jan. 1966, Humpata; [417] c/1, 1 Dec 1969, Calunda. First breeding record for Angola (Dean 2000).

Variable Sunbird *Cinnyris venustus*

[202] c/2, 18 Mar. 1966, Cristo Rei. First breeding record for Angola (Dean 2000).

Passeridae

White-browed Sparrow-Weaver *Plocepasser mahali*

[298] c/1, 28 Feb. 1968, Quipungo; [287] c/2, 8 Feb. 1968, Montipa; [487] c/2, 24 Jun. 1970, Jau.

Cape Sparrow *Passer melanurus*

[243] c/1, 19 May 1966, Mão de Octávio de Matos.

Yellow-throated Petronia *Gymnoris superciliaris*
 [353] c/3, 2 Oct. 1968, Cutenda; [24789] 3y, 10 Sept. 1968, Vambunde; [514] c/3, 25 Aug. 1971, Mussende; [34903] 2y, 24 Aug. 1971, Mussende.

Ploceidae

All egg and nest records in the collection were summarized in Dean (2000). However, nest

1969, Carunjamba; [606] c/2, 24 Nov. 1971, Cahama.

Village Weaver *Ploceus cucullatus*

[1] c/3, 29 Mar. 1961, Fazenda Boa Esperança; [5] c/2, 29 Mar. 1961, Fazenda Boa Esperança; [24] c/1, 12 Apr. 1965, Omupanda (= Nompaca R.); [291] c/2, 12 Feb. 1968, Minilinhonde; [292] c/1, 12 Feb. 1968, Minilinhonde; [294] c/1, 19 Feb. 1968, Vila Arriaga; [295] c/3, 19 Feb. 1968, Vila Arriaga; [375] c/2, 22 Apr. 1969, Montipa; [376] c/3, 22 Apr. 1969, Montipa; [374] c/2, 22 Apr. 1969, Montipa; [607] c/2, 11 Feb. 1973, Quipungo.

Vieillot's Black Weaver *Ploceus nigerrimus*

[364] c/2, 14 Oct. 1968, Uige (town).

Chestnut Weaver *Ploceus rubiginosus*

[25] c/2, 12 Apr. 1965, Omupanda (= Nompaca R.).

Dark-backed Weaver *Ploceus bicolor*

[25] c/2, 12 Apr. 1965, Omupanda (= Nompaca R.).

Red-headed Weaver *Anaplectes rubriceps*

[563] c/2, 18 Oct. 1972, Cachingues.

Black-winged Red Bishop *Euplectes hordeaceus*

[483] c/2, 25 May 1970, Chongoroi.

Southern Red Bishop *Euplectes orix*

[16] c/2, 10 Apr. 1965, Omupanda (= Nompaca R.); [17] c/1, 10 Apr. 1965, Omupanda (= Nompaca R.); [18] c/2, 10 Apr. 1965, Omupanda (= Nompaca R.); [31] c/2, 15 Apr. 1965, Huíla (town); [32] c/4, 15 Apr. 1965, Huíla (town); [33] c/2, 15 Apr. 1965, Huíla (town); [34] c/2, 15 Apr. 1965, Huíla (town); [35] c/1, 15 Apr. 1965, Huíla (town); [36] c/2, 15 Apr. 1965, Huíla (town); [37] c/4, 15 Apr. 1965, Huíla (town); [38] c/4, 15 Apr. 1965, Huíla (town); [39] c/3, 15 Apr. 1965, Huíla (town); [57] c/1, 23 Apr. 1965, Omupanda (= Nompaca R.); [58] c/2, 23 Apr. 1965, Omupanda (= Nompaca R.); [59] c/2, 23 Apr. 1965, Omupanda (= Nompaca R.); [60] c/3, 23 Apr. 1965, Omupanda (= Nompaca R.); [61] c/2, 29 Apr. 1965, Omupanda (= Nompaca R.); [68] c/3, 29 Apr. 1965, Omupanda (= Nompaca R.); [69] c/3, 29 Apr. 1965, Omupanda (= Nompaca R.); [70] c/3, 29 Apr. 1965, Omupanda (= Nompaca R.); [72] c/3, 29 Apr. 1965, Omupanda (= Nompaca R.); [73] c/2, 29 Apr. 1965, Omupanda (= Nompaca R.); [74] c/2, 29 Apr. 1965, Omupanda (= Nompaca R.); [75] c/1, 29 Apr. 1965, Omupanda (= Nompaca R.); [76] c/3, 29 Apr. 1965, Omupanda (= Nompaca R.); [230] c/2, 1 Apr. 1966, Mucanca; [228] c/2, 1 Apr. 1966, Mucanca; [226] c/2, 1 Apr. 1966, Mucanca; [231] c/3, 1 Apr. 1966, Mucanca; [232] c/3, 1 Apr. 1966, Mucanca; [171] c/2, 18 Feb. 1966, Tundavala; [183] c/3, 23 Feb. 1966, Omupanda; [201] c/3, 9 Mar. 1966, Huíla (town); [194] c/1, 3 Mar. 1966, Humpata; [214] c/1, 25 Mar. 1966, Omupanda; [215] c/3, 25 Mar. 1966, Omupanda; [267] c/2, 30 Jan. 1967, Mungolo; [265] c/3, 30 Jan. 1967, Mungolo; [264] c/3, 30 Jan. 1967, Mungolo; [392] c/3, 2 May 1969, Huíla (town); [433] c/3, 8 Apr. 1970, Lubango; [575] c/3, 21 Apr. 1974, Lubango; [576] c/4, 21 Apr. 1974, Lubango.

Fan-tailed Widowbird *Euplectes axillaris*

[237] c/2, 1 Apr. 1966, Mucanca; [175] c/2, 18 Feb. 1966, Tundavala; [137] c/1, 13 Jan. 1966, Omupanda (= Nompaca R.); [280] c/3, 20 Apr. 1967, Nongombe; [268] c/1, 16 Feb. 1967, Chibia.

White-winged Widowbird *Euplectes albonotatus*

[54] c/2, 23 Apr. 1965, Omupanda (= Nompaca R.); [240] c/2, 6 Apr. 1966, Mucanca; [238] c/1, 6 Apr. 1966, Mucanca; [229] c/2, 1 Apr. 1966, Mucanca; [227] c/1, 1 Apr. 1966, Mucanca; [225] c/1, 1 Apr. 1966, Mucanca; [233] c/1, 1 Apr. 1966, Mucanca;

[234] c/2, 1 Apr. 1966, Mucanca; [235] c/2, 1 Apr. 1966, Mucanca; [236] c/1, 1 Apr. 1966, Mucanca; [172] c/2, 18 Feb. 1966, Tundavala; [182] c/1, 23 Feb. 1966, Tundavala; [195] c/1, 3 Mar. 1966, Humpata; [213] c/2, 25 Mar. 1966, Omupanda.

Estrildidae

Orange-winged Pytilia *Pytilia afra*

[41] 1e + 3y, 16 Apr. 1965, Lubango, 16 km north; [10976] 3y, 14 Apr. 1965, Lubango; [66] 5y, 20 Aug. 1965, Cangandala (village); [12941] 4y, 30 Aug. 1965, Mar. imbanguengo; [271] 1y, 14 Sept. 1971, Mussende.

Green-winged Pytilia *Pytilia melba*

[281] c/4, 20 Apr. 1967, Nongombe.

Red-headed Finch *Amadina erythrocephala*

[4885] 2y, 25 Aug. 1963, Pedra Grande; [4910] 1y, 24 Aug. 1963, Pedra Grande; [4912] 1y, 26 Aug. 1963, Pedra Grande.

Dusky Twinspot *Euschistospiza cinereovinacea*

[7] c/2, 17 May 1964, Mt Moco. Dean (2000) had no egg records.

Red-billed Firefinch *Lagonosticta senegala*

[403] c/1, 15 May 1969, Chibia. First breeding record for Angola (Dean 2000).

Jameson's Firefinch *Lagonosticta rhodopareia*

[42] 4e + 1y, 19 Apr. 1965, Tchiamenha; [56] 5y, 29 Apr. 1965, Omupanda (= Mupanda); [57] 5y, 29 Apr. 1965, Omupanda (= Mupanda); [11003] 1y, 19 Apr. 1965, Tchiamenha; [11157] 5y, 29 Apr. 1965, Omupanda (= Nompaca R.); [11158] 5y, 29 Apr. 1965, Omupanda (= Nompaca R.); [10] 5y, 5 Jun. 1965, Cangalongue; [127] 4y, 10 Feb. 1966, Tundavala; [225] 5y, 22 Apr. 1969, Montipa; [27] c/4, 14 Apr. 1965, Lubango; [40] c/2, 15 Apr. 1965, Lubango; [30] c/4, 14 Apr. 1965, Lubango; [66] c/2, 15 May 1965, Lubango; [95] c/3, 26 May 1965, Quilemba; [160] c/5, 2 Feb. 1966, Lubango; [162] c/4, 9 Feb. 1966, Lubango.

Blue Waxbill *Uraeginthus angolensis*

[140] c/5, 13 Jan. 1966, Omupanda (= Nompaca R.); [141] c/2, 13 Jan. 1966, Omupanda (= Nompaca R.); [311] c/3, 22 Apr. 1968, Omupanda (= Nompaca R.); [309] c/2, 5 Apr. 1968, Lubango, 16 km north; [481] c/4, 18 May 1970, Chiange; [583] c/2, 22 May 1974, Lagoa Iventala. First breeding records for Angola (Dean 2000).

Violet-eared Waxbill *Uraeginthus granatinus*

[581] c/3, 7 May 1974, Cahama. First breeding record for Angola (Dean 2000).

Angolan Waxbill *Coccycgia bocagei*

[15149] 4y, 23 Feb. 1966, Tundavala; [273] c/3, 22 Mar. 1967, Fazenda Bruco. First breeding record for Angola (Dean 2000).

Orange-breasted Waxbill *Amandava subflava*

[3] c/5, 10 Jun. 1963, Lubango; [20] c/4, 10 Apr. 1965, Omupanda (= Nompaca R.); [222] c/1, 29 Mar. 1966, Omupanda; [221] c/1, 29 Mar. 1966, Omupanda.

Bronze Mannikin *Lonchura cucullata*

[10913] 1y, 6 Apr. 1965, Lubango, 10 km on Tundavala road; [15414] 2y, 21 Feb. 1966, Cristo Rei; [14872] 3e + 2y, 17 Jan. 1966, Cascatada, Tundavala; [21656] 4y, 15 Feb. 1968, Fazenda da Leba.

Motacillidae

Cape Wagtail *Motacilla capensis*

[181] c/1, 22 Nov. 1965, Tchivinguiro. Dean (2000) had no egg records.

Fülleborn's Longclaw *Macronyx fuilleborni*

[356] c/1, 17 Oct. 1968, Chipindo; [25812] 1y, 18 Oct. 1968, Chipindo; [413] c/3, 2 Nov. 1969, Nongombe.

African Pipit *Anthus cinnamomeus*

[126] c/3, 8 Dec 1965, Tchivinguiro; [130] c/3, 15 Dec 1965, Tchivinguiro; [117] c/3, 15 Nov. 1965, Tchivinguiro; [120] c/2, 31 Nov. 1965, Lagoa Nuntechite. Dean (2000) had no egg records.

Long-billed Pipit *Anthus similis*

[204] 1e + 2y, 15 Sept. 1968, Muquequete; [337] c/1, 15 Sept. 1968, Muquequete; [24978] 3y, 15 Sept. 1968, Muquequete. Dean (2000) had no egg records.

Buffy Pipit *Anthus vaalensis*

[148] 2y, 22 Aug. 1966, Mucanca; [18370] 1y, 22 Aug. 1966, Mucanca. First breeding record for Angola (Dean 2000).

Fringillidae

Yellow-fronted Canary *Crithagra mozambica*

[6673] 1y, 11 Mar. 1964, Humpata; [15029] 5y, 9 Feb. 1966, Ponta da Lubango; [154] c/3, 18 Jan. 1966, Omupanda (= Nompaca R.).

Emberizidae

Cinnamon-breasted Bunting *Emberiza tahapisi*

[407] c/3, 23 May 1969, Gambos (Chilemba). First breeding record for Angola (Dean 2000).

Golden-breasted Bunting *Emberiza flaviventris*

[32545] 2y, 20 Nov. 1970, Tundavala; [501] c/1, 21 Jan. 1971, Nehone.

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APPENDIX I.

Localities, provinces, latitude south and longitude east for places mentioned in the text.

Acampamento da Caua, Luanda, 09° 20' S; 13° 30' E
 Boa Esperança, Luanda, 08° 53' S; 13° 34' E
 Bocoio, Benguela, 12° 28' S; 14° 08' E
 Bumbo, Namibe, 15° 10' S; 13° 09' E
 Cabuta, Cuanza Sul, 09° 50' S; 14° 52' E
 Cachingues, Bié, 13° 04' S; 16° 45' E
 Caongo (= Lândana), Cabinda, 05° 13' S; 12° 08' E
 Cacungun, Malanje, 09° 25' S; 16° 21' E
 Cahama, Cunene, 16° 17' S; 14° 18' E
 Caitou, Namibe, 14° 28'

Dongue, Huíla. 15° 45' S; 14° 05' E
 Dundaiundo, Huíla. 15° 12' S; 13° 17' E
 Eica, Huíla. 15° 12' S; 13° 42' E
 Fazenda Boa Esperança, Bengo. 08° 49' S; 13° 32' E
 Fazenda Brubo, Huíla. 15° 08' S; 13° 10' E
 Fazenda da Cacanda, Namibe. 14° 47' S; 13° 17' E
 Fazenda da Leba, Huíla. 15° 05' S; 13° 16' E
 Fazenda Hissapa, Benguela. 11° 58' S; 14° 04' E
 Foz do Cunene, Namibe. 17° 23' S; 11° 47' E
 Gambos (Chilemba), Huíla. 15° 45' S; 14° 05' E
 Gogué, Huíla. 13° 50' S; 15° 47' E
 Goma, Cuando Cubango. 17° 10' S; 18° 09' E
 Guengue, Huíla. 13° 57' S; 14° 59' E
 Huíla (town), Huíla. 15° 05' S; 13° 33' E
 Humbe, Cunene. 16° 40' S; 14° 55' E
 Humpata, Huíla. 15° 01' S; 13° 23' E
 Iona Posto, Namibe. 16° 54' S; 12° 35' E
 Kuito (= Bié (Bihe) (town), Bié. 12° 23' S; 16° 57' E
 Lagoa Iventala, Huíla. 15° 01' S; 13° 23' E
 Lagoa Nuntechite, Huíla. 15° 07' S; 13° 25' E
 Leba, Huíla. 15° 04' S; 13° 16' E
 Lubango, Huíla. 14° 51' S; 13° 37' E
 Lubango (= Sá da Bandeira), Huíla. 14° 56' S; 13° 34' E
 Lubango, 16 km north, Huíla. 14° 51' S; 13° 37' E
 Mão de Octávio de Matos, Namibe. 15° 46' S; 11° 58' E
 Mar. imbanguengo, Malanje. 08° 11' S; 17° 29' E
 Matala, Huíla. 14° 43' S; 15° 02' E
 Melunga, Cunene. 17° 17' S; 16° 25' E
 Minilinhonde, Huíla. 15° 01' S; 13° 23' E
 Missão Católica de Sangueve, Huíla. 13° 53' S; 15° 50' E
 Missão de Mizenze, Bié. 12° 55' S; 16° 57' E
 Missão do Chillesso (= Missão do Andulo), Bié. 11° 35' S; 16° 34' E
 Missão do Munhino, Namibe. 14° 54' S; 12° 58' E
 Montipa, Namibe. 14° 39' S; 13° 16' E
 Mt Moco, Huambo. 12° 25' S; 15° 11' E
 Mt Soque, Huambo. 12° 22' S; 15° 07' E
 Mucanca, Huíla. 14° 56' S; 13° 34' E
 Mucope (= Tchica), Cunene. 16° 38' S; 14° 54' E

Mungolo, Huíla. 15° 09' S; 13° 44' E
 Muquequete, Huíla. 14° 52' S; 14° 14' E
 Mussende, Cuanza Sul. 10° 30' S; 16° 02' E
 Nehone, Cunene. 16° 38' S; 16° 02' E
 Nongombe, Huíla. 14° 50' S; 13° 29' E
 Omupanda (= Nompaca R.), Cunene. 17° 08' S; 15° 46' E
 Palanca, Huíla. 14° 57' S; 13° 16' E
 Pedra Grande, Namibe. 15° 01' S; 12° 35' E
 Pirangombe, Namibe. 14° 29' S; 13° 03' E
 Ponta da Lubango, Huíla. 14° 56' S; 13° 34' E
 Ponte Salazar, Malanje. 09° 53' S; 16° 17' E
 Quihita, Huíla. 15° 24' S; 13° 58' E
 Quilemba, Huíla. 14° 46' S; 13° 29' E
 Quilengues, Huíla. 14° 13' S; 14° 11' E
 Quipeio, Huambo. 12° 26' S; 15° 31' E
 Quipungo, Huíla. 14° 49' S; 14° 33' E
 Quissongo, Cuanza Sul. 10° 02' S; 15° 05' E
 Quiteve, Cunene. 16° 02' S; 15° 11' E
 Rio Cuando (= Nova Monçao), Huambo. 11° 44' S; 18° 39' E
 Rio Cubango, Cuando Cubango. 12° 42' S; 18° 02' E
 Rio da Areia, Huíla. 15° 37' S; 14° 03' E
 Rio Maubi, Malanje. 09° 47' S; 16° 41' E
 Rio Mutuco, Huíla. 14° 49' S; 13° 23' E
 Serra da Neve, Namibe. 13° 45' S; 13° 10' E
 Siengo, Bié. 11° 17' S; 17° 36' E
 Tápuia, Huíla. 13° 50' S; 15° 47' E
 Tchiamenha, Huíla. 14° 49' S; 13° 24' E
 Tchivinguiro, Huíla. 15° 10' S; 13° 18' E
 Toco, Huíla. 14° 49' S; 13° 47' E
 Tundavala, Huíla. 14° 50' S; 13° 24' E
 Uige (town), Uíge. 07° 35' S; 15° 00' E
 Uncondo, Huíla. 16° 03' S; 14° 07' E
 Unguéría, Huíla. 15° 19' S; 13° 32' E
 Viavala, Huíla. 15° 10' S; 13° 18' E
 Vila Arriaga, Namibe. 14° 46' S; 13° 21' E
 Virute, Huíla. 15° 14' S; 13° 19' E
 Vite-Vivar, near Cacula, Huíla. 14° 26' S; 14° 03' E
 Xangongo (= Roçadas), Cunene. 16° 45' S; 14° 59' E

THE REDISCOVERY OF A COLLECTION OF ECHINODERMS, INCLUDING TWO HOLOTYPE – IN THE DURBAN NATURAL SCIENCE MUSEUM, SOUTH AFRICA

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Olberson, J.M., Rowe, F.W.E., Griffiths, C.L. & Samyn, Y. 2013. The rediscovery of a collection of echinoderms, including two holotypes, in the Durban Natural Science Museum, South Africa. Durban Natural Science Museum Novitates 36: 11–29. This paper reports on an orphaned collection of echinoderms housed at the Durban Natural Science Museum, South Africa. The collection includes holotypes of the South African endemic ophiuroid *Asteroschema capensis* Mortensen, 1925 [= *Asteromorpha capensis* (Mortensen, 1925)] according to Okanishi et al. (2013) and the South African endemic asteroid *Anthenoides marleyi* Mortensen, 1925. The holotype of the asteroid *Hacelia superba* var. *capensis* Mortensen, 1925 has not been found and is considered lost, whilst the holotype of *Anthosticte pacei* Mortensen, 1925 [= *Tethyaster pacei* (Mortensen, 1925)] is reported to be housed in the Zoological Museum Copenhagen, Denmark. The collection includes both wet and dry specimens of extant Asteroidea, Ophiuroidea, Echinoidea and Holothuroidea with Crinoidea being absent. Holothuroidea were excluded from examinations due to lack of locality data. In addition, *Plococidaris verticillata* (de Lamarck, 1816) is a new distribution record for South Africa. This paper gives new accession numbers of the specimens and the only photographic record of this collection.

KEYWORDS: *Anthenoides marleyi*, *Asteroschema capensis*, *Anthosticte pacei*, Echinodermata; echinoderm collection, holotype.

INTRODUCTION

In 2011, the National Research Foundation and the South African National Biodiversity Institute commissioned an audit of the national science and zoological collections to assess the state and sustainability of the natural collections within South Africa (Prof. Michelle Hamer pers. comm.). This process noted that echinoderms were part of the Durban Natural Science Museum (DNSM) collection. Among the specimens, the holotypes of the ophiuroid species *Asteroschema capensis* Mortensen, 1925 and the asteroid species *Anthenoides marleyi* Mortensen, 1925 were found preserved dry and in good condition. Some of the specimens had accession numbers but the catalogue in which these are recorded is unknown and presumed lost (Dr Kirstin Williams, pers. comm.).

The importance of this collection to Mortensen's (1925) paper became immediately apparent, for in it he reported that he had received a small collection of echinoderms from Dr E.C. Chubb, Curator of what was then known as the Durban Museum and Art Gallery. The material included specimens of *Dactylosaster cylindricus* (de Lamarck 1816) and *Ophiactis savignyi* (Müller & Troschel 1842), neither of which can now be found in the DNSM. More importantly, however, Mortensen described three new species, *Asteroschema capensis*, *Anthenoides marleyi* and *Anthosticte pacei* [= *Tethyaster pacei* according to Clark, A.M. &

Clark, A.H. 1954] from this collection. The holotypes of the first two of these species are still located in the DNSM collection but that of *A. pacei* is located in the Zoological Museum, Copenhagen, Denmark (<http://www.zmuc.dk/InverWeb/invertebrater/Hjemmesider/Asteroidea.htm>). Lastly, Mortensen described a variety of the Atlantic starfish *Hacelia superba* (var. *capensis*) from DNSM material.

Although the remaining echinoderm collection at the DNSM is small, a few additions have been made subsequent to Mortensen's work but the labels are not consistent in indicating the collectors. The collection contains specimens of Asteroidea, Ophiuroidea and Echinoidea. No Crinoidea are included in the collection and although Holothuroidea were present, no location data were found and these specimens have therefore been excluded from the following account.

Re-discovered species are listed by class, in generic alphabetical order, under the currently accepted names. The collection number, locality data, origin, measurements, number of specimens and mode of preservation are presented in Appendix 1. Photographs of specimens are also presented (Plates 1–4). The localities referred to for all specimens in this study are shown in Figure 1.