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LIST OF TYPE SPECIMENS OF BIRDS IN THE ZOOLOGICAL MUSEUM OF THE UNIVERSITY OF AMSTERDAM (ZMA), INCLUDING TAXA DESCRIBED BY ZMA STAFF BUT WITHOUT TYPES IN THE ZMA

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ABSTRACT

The type specimens in the bird collection of the Zoological Museum of the University of Amsterdam (ZMA) are listed and discussed. The ZMA, founded 1838, has types of 51 taxa; at least 31 of these are still in use as valid names of species or subspecies, the remainder are synonyms of taxa described earlier or require confirmation. Twenty-three of the 51 taxa in the ZMA consist of holotypes (22 specimens), 11 are syntypes (17 specimens), and 33 are paratypes (110 specimens), and altogether 149 specimens have type status. Among the types of valid species are those of birds like Japanese Waxwing *Bombycilla japonica* (described 1824) and Sillem's Mountain-finch *Leucosticte sillemi* (described 1992). Also, 23 taxa are discussed of which the ZMA has no types, either because they are apparently lost (three taxa) or of which one would expect the ZMA has any because they were described by staff associated with the ZMA (15 taxa) or taken by collectors associated with the ZMA (five taxa); these are listed in square brackets. Of the 74 taxa enumerated below, most were described in 1863-1876 (12 taxa), 1937-1953 (27), and 1992-2000 (19). New names introduced in this paper are *Cacatua tanimberensis* (new name for *Plictolophus goffini* Finsch, 1867, a name preoccupied by *Lophochroa goffini* Finsch, 1863, which latter is a synonym of *Plyctolophus ducorps* Bonaparte, 1850) for the Tanimber Corella, and *Pericrocotus cinnamomeus osmastoni*, a validation of a name originally intended by Snouckaert, 1930, but not formally described, for the Andaman Small Minivet. The designation of a neotype for *Limosa baueri* Naumann, 1836, is corrected: the action was invalid as the original holotype is still present in Vienna.

INTRODUCTION

During a conference on the value of bird collections in museums organized by the British Ornithologists' Union in November 1999 a plea was made that every collection should publish a list of the types in their collection. An inventory made in the late 1990-s of bird collections and presented during the conference by C.S. Roselaar of the Zoological Museum Amsterdam (ZMA) made clear that information on types was still lacking for many collections, a situation lamented

by much of the audience. Indeed, even the ZMA itself had not such a list. Admittedly, the Amsterdam bird collection, though fairly large in size (50 000 skins), does not contain many types because the collection was not build up in earnest until K.H. Voous was appointed as assistant curator in 1945, after the heyday of descriptive taxonomy. Consequently, relatively few types are available, but that does not obviate the need for a list. Here, we present such a list for the ZMA. The type-list includes also taxa described by people associated with the ZMA, but of which the types are deposited elsewhere. This is mainly done to facilitate to find the location where the type is at present: a taxon described by, e.g., a well-known name like Voous leads one to think that the type is in the ZMA because of the long association of Voous with this collection. Of course this is not automatically the case, but by mentioning these taxa here the true whereabouts of the specimens can easily be traced. Moreover, this gives us the chance to mention details on paratypes of these taxa, data frequently absent in the original descriptions. Also, some other forms of which one may suppose that the ZMA has types but which in fact are missing are discussed.

THE OLDER TYPES

The present-day ZMA was founded in 1838 as the Museum of the (Koninklijk) Zoölogisch Genootschap [Royal Zoological Society] 'Natura Artis Magistra', which also maintained a zoological garden in Amsterdam, nowadays known as 'Artis Zoo'. In the early years, most of the birds on show in the museum had once lived in the Zoo, but also quite a number of dead ones were donated by members of the Society. Though scientists were associated with the ZMA for many other groups of animals, like Crustacea, Insecta, and Mollusca, no one was strictly devoted to birds before the arrival of K.H. Voous. Consequently, the scientific collections for other animal groups expanded far more rapidly than that of the Aves, which latter group was mainly curated by taxidermists and collection managers. Before 1945, the bird collection of the ZMA was primarily a show collection, not a scientific one, and consequently most birds were mounted rather than retained as a study skin. Staff members of the ZMA collecting birds during their travels in the 19th and the first half of the 20th century did not keep these skins for the ZMA, but sent them away for identification, mainly to the Leiden Museum. These generally remained in the scientific collection there, while at best some duplicates were returned to the ZMA. Also, live unknown birds received for the Amsterdam Zoo were identified by Leiden staff, and sent there after death, especially if previously undescribed. The Amsterdam collection was apparently considered to be less secure or of inferior value compared to the Leiden one; thus, when Prince Bonaparte described a mounted parrot from the Amsterdam museum as new to science (*Eos semilarvata*), he pressed the director of the Amsterdam collection to send the type to Leiden (see Bonaparte, 1850b), where it still is.

Nevertheless, the mounted collection in Amsterdam was one of the larger ones of the world, with 2055 birds of 1346 species, 330 (partial) skeletons, and 1410 eggs on show in early 1863 (Maitland, 1863), and much time and money was put into its enlargement, especially by buying rare species from dealers like G.A. Frank of Amsterdam (later London). In these days, new taxa were often described from series of skins, and the original author was usually content with retaining only a few of the 'best' specimens of the original series, selling the remainder to a bird dealer. In this way, quite a number of syntypes or paratypes must have reached the ZMA, where a few hundreds of birds were obtained from dealers between ca. 1850 and 1880. Alas, the standard procedure for dealers was to throw away the original label, replacing it for one with no more details on it than its name and general distribution. Thus, it is difficult to decide now which birds are types or are part of a type series and which are not. Voous started to label birds in the 1950-s, and painstakingly tried to retrieve all information known from the specimen, but was not always successful. Further information on the history of the bird department of the ZMA can be found in, e.g., Maitland (1863, 1888) and Roselaar (1990 and in press).

At present, only a number of old larger birds of the ZMA is still mounted (like our fine Great Auk *Pinguinus impennis*), next to a series of fairly recent mounts for exhibition; all other former mounts

are in the skin collection, including the types in this list.

VALIDITY OF NAMES

Usually, type lists mention the modern name of a species, if it is no longer known under the name as it was described. This modern naming is mainly based on revisions as published in the Checklist of Birds of the World of Peters et al. (1934-1986, 16 volumes). However, quite a number of names listed below were coined after the appearance of the various volumes of Peters. When a name is relegated to synonymy in the following list, this is mostly based on own research, e.g., when working on the taxonomic parts of the Handbook of Western Palearctic Birds (Cramp et al., 1977-1994, nine volumes).

MEASUREMENTS

As far as types in the ZMA are concerned, all measurements were recently taken by C.S. Roselaar, unless otherwise noted, using the methods as described in Svensson (1992) and comparable with the data published in the Handbook of Western Palearctic Birds. All are in mm, and are given to the nearest mm when taken with a ruler and to one-tenth of a mm when measured with calipers. Measurements of types not in the ZMA are copied from the original papers.

SEQUENCE OF THE LIST

The families listed below are arranged in the Wetmore-order (Wetmore, 1940); within families, taxa are arranged in sequence of description, but taxa belonging to the same species are grouped together for convenience.

MUSEUM ACRONYMS USED

AMNH - American Museum of Natural History, New York, USA.
BMNH - The Natural History Museum, Bird Group, Tring (Herts), United Kingdom.
CM - Carnegie Museum of Natural History, Pittsburgh (Penns), USA.
CUMZ - Museum of Zoology, Cambridge University, Cambridge, United Kingdom.
HZM - Harrison Zoological Museum, Sevenoaks (Kent), United Kingdom.
MVZ - Museum of Vertebrate Zoology, University of California, Berkeley, USA.
MCZ - Museum of Comparative Zoology, Harvard University, Cambridge (Mass.), USA.
MZB - Museum Zoologicum Bogoriense, Cibinung, Java, Indonesia.
NMBA - Naturhistorisches Museum, Basel, Switzerland.
NMW - Naturhistorisches Museum, Wien, Austria.
NRM - Naturhistoriska Riksmuseet, Stockholm, Sweden.
RMNH - Naturalis, Nationaal Natuurhistorisch Museum, Leiden, the Netherlands.
RMSE - National Museums of Scotland, Dept. of Geology and Zoology, Edinburgh, United Kingdom.
SMF - Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt am Main, Germany.
SMTD - Staatliches Museum für Tierkunde, Dresden, Germany.
ZFMK - Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany
ZISP - Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia.
ZMA - Zoological Museum, University of Amsterdam, Amsterdam, the Netherlands.
ZMB - Museum für Naturkunde, Humboldt-Universität, Berlin, Germany.
ZMM - Zoological Museum, Moscow State University, Moscow, Russia.
ZMUC - Zoologisk Museum, Københavns Universitet, Copenhagen, Denmark.
ZSM - Zoologische Staatssammlung, München, Germany.

LIST OF TYPES

TINAMIDAE

Crypturus kerberti Büttikofer, 1896: 1

Current name perhaps *Crypturellus tataupa tataupa*, but see below.

PARALECTOTYPE. - ZMA 4961, adult female, bought in Antwerpen (Belgium) and said to be from Argentina; died in the Amsterdam Zoo 2 Nov 1896, labeled *Crypturus kerberti*; wing 140, tail ca. 28, bill to feathers 25.0, tarsus 35.3.

The holotype, RMNH 87007, is an adult female from 'Argentina' which died in the Amsterdam Zoo on 2 Apr 1896, donated to the RMNH by Kerbert, the director of the Zoo; tail 25, culmen 22, tarsus 30 (Büttikofer, 1896; Van den Hoek Ostende et al., 1997). From Büttikofer (1896), it is perfectly clear that only this sole Leiden specimen served as a base for the description of the new taxon, even though it was in imperfect state due to its stay in captivity, e.g., showing incomplete wings. Therefore, it is important to note that other birds survived from the same live batch received from 'Argentina', in this case the specimen in the ZMA referred to above, and RMNH cat. nr. 2, female, died 21 Oct 1896, both in perfect condition and therefore far more suitable to settle the status of this taxon.

When compared with a few birds of *C. tataupa* in the ZMA, the dark and extensive slate-grey head, hindneck, and underparts of these specimens of *C. kerberti* are striking, but larger series of *C. t. tataupa* in the RMNH show quite some variation in this respect. Also, the ZMA bird seems rather large when compared with the data of *C.t. tataupa* published in Blake (1977), though still within the range of measurements. As the localities of the series of *tataupa* examined are poorly detailed, it seems possible that the dark birds among them form a separable geographical race to be named *kerberti*, but without a larger series with more exact locality details available we agree with Hellmayr & Conover (1942: 79) in provisionally relegating *kerberti* to the synonymy of nominate *tataupa*.

ANHINGIDAE

[**Protoplotus beauforti** Lambrecht, 1930: 15]

[HOLOTYPE. - ZMA —; whereabouts at present unknown]

The type was for many years on show in one of the wall-cabinets of Prof. Dr. L.F. de Beaufort, but it vanished after his retirement (K.H. Voous, pers. comm.). It consisted of a nearly complete skeleton on a stone plate of 190 x 210 mm, found in fresh water deposits of Eocene age at Sipang (W Sumatra, Indonesia), together with ca. 1000 fossil fishes (Lambrecht, 1930). A cast in gypsum is present in the Hungarian Geological Museum (Budapest). The type is not now in the bird department of the ZMA, which has virtually no fossil collections.

ACCIPITRIDAE

Accipiter virgatus vanbemmeli Voous, 1950b: 99

HOLOTYPE. - ZMA 2589, adult male, Berastagi (1450 m, N of Lake Toba, N Sumatra, Indonesia), collected 28 Mar 1914 for L.P. le Cosquino de Bussy (coll. nr. 110a); wing 159, tail 120, bill to cere 10.7, tarsus 45.2.

Voous (1950b) lists 11 further birds (two adult males, three adult females, six immatures), all of which can be considered as paratypes, but does not mention details of these. As birds from the RMNH, MZB, AMNH, and MCZ were examined for his study, the paratypes of *vanbemmeli* are among these collections.

This form is close to *rufotibialis* from Borneo, but the underparts are purer rufous, less vinous.

Accipter rhodogaster butonensis Voous [in] Van Bemmel & Voous, 1951: 82

HOLOTYPE. - ZMA 8702, adult female, Butung I. (off SE Sulawesi, Indonesia), collected in Aug 1909 by Mohari (coll. nr. 175) for J. Elbert, received 9 Sep 1950 from the MZB; wing 213, tail 157, bill to cere ca. 15.6, tarsus 59.4.
PARATYPE. - ZMA 47902, male in moult from juvenile to adult, Bau-bau, coastal Butung, collected 14 Oct 1948 by G.A.L. de Haan (coll. nr. 684), ex Van Marle coll. nr. 902; wing 166, tail 127, bill to cere 13.2, tarsus 51.6.
PARATYPE. - ZMA 47903, juvenile female, Bau-bau, coastal Butung, collected 14 Oct 1948 by De Haan (coll. nr. 679), ex Van Marle coll. nr. 903; wing 205, tail 154, bill to cere 16.0, tarsus 62.8.

According to Van Bemmel & Voous (1951), also the following birds were examined: one adult male each from Muna and Butung in the Elbert collection in the SMF, and two further males and one female from these islands taken by Elbert, probably in the MZB.

This form is put into synonymy of *A. rhodogaster rhodogaster* by E. Stresemann & D. Amadon (in Mayr & Cottrell, 1979), but the two adults examined are clearly paler and more vinous-pink (less bright rufous) below than a large series of nominate *rhodogaster* from N Sulawesi in ZMA and RMNH.

Fig. 1. Paratype of *Falco peregrinus harterti* Buturlin, 1907: ZMA 43803, adult male, 21 Jul 1905, Alazeya Delta (NE Siberia, Russia), collector S.A. Buturlin. © L. van der Laan, ZMA.

FALCONIDAE

Falco peregrinus harterti Buturlin, 1907a: 99

Fig. 1

Currently either considered to be a valid race (Stepanyan, 1990), or as a step on the cline from *Falco peregrinus calidus* to *F. p. japonensis* (Vaurie, 1965).

PARATYPE. - ZMA 43803, adult male, collected 21 Jul 1905 in the Alazeya Delta (NE Siberia) by S.A. Buturlin, ex Snouckaert/Van Marle coll. nr. 3803; wing 317, tail 148, bill to cere 20.5, tarsus 48.2.
PARATYPE. - ZMA 43804, adult female, collected Jul 1905 in the Kolyma Delta (NE Siberia) by Buturlin, ex Snouckaert/Van Marle coll. nr. 3804; wing 352, tail 168, bill to cere 25.0, tarsus 54.5.

The range of this taxon was said to extend from "the Lower Lena to Anadyr, common on the Kolyma" (Buturlin, 1907a). It was based on a series of skins which included our birds and were all syntypes, but Sudilovskaya (1962) mentions a [lecto] 'type' from the Kolyma delta (ZMM coll. nr. R-5119, male, spring 1905) and a 'cotype' from Abai (at 63°N on the Indigirka R.; ZMM coll. nr. R-6369, female, spring 1905), both also collected by Buturlin.

MEGAPODIIDAE

[**Talegalla cuvieri granti** Roselaar, 1994a: 11]

[HOLOTYPE. - BMNH 1911.12.20.2, adult male, upper Iwaka River at the S foot of the Pegunungan Sudirman Mts. (ca. 4°14'S 136° 56'E, Irian Jaya, Indonesia), collected 11 Feb 1911 by C.H.B. Grant; wing 285, tail 169, bill to skull 47.2, tarsus 101.]
[PARATYPES. - BMNH 1911.12.20.1 and 1911.12. 20.3, adult males, collected resp. 30 Jan 1911 and 13 Feb 1911 on or near the same locality.]

For further details of this and the following taxa of megapodes, see Roselaar (1994a) and Jones et al. (1995).

[**Talegalla fuscirostris aruensis** Roselaar, 1994a: 15]

[HOLOTYPE. - RMNH 87349 ('*T. cuvieri* cat. nr. 2'), adult female, Wonumbai (Aru Is., Indonesia), collected on 16 May 1865 by C.B.H. von Rosenberg; wing 271, tail 145, bill to skull ca. 38.5, tarsus 81.]
[PARATYPES. - RMNH 87350 ('*T. cuvieri* cat. nr. 13'), male, Trangan (Aru Is), collected 9 Jul 1865 by Von Rosenberg; SMTD C 7298, male, Gomo (Aru Is), collected in or before 1883 by P.G.F. Riedel; ZMB 51178, female, Wanggar (Aru Is), collected 25 Jul 1931 by G. Stein.]

[**Talegalla fuscirostris meyeri** Roselaar, 1994a: 16]

[HOLOTYPE. - SMTD C 772, adult female, Rubi (S shore of Geelvink Bay, Irian Jaya, Indonesia), collected May 1873 by A.B. Meyer; wing 284, tail 167, bill to skull 39.0, tarsus 86.]
[PARATYPES. - SMTD C 767, male, Napan (W shore of

Geelvink Bay), collected May 1873 by Meyer; SMTD C 769, male, Rubi, collected May 1873 by Meyer; ZMB 9409, sex, date, and locality unknown (collectors label lost), collected by Meyer.]

[**Megapodius cumingii talautensis** Roselaar, 1994a: 23]

[HOLOTYPE. - SMTD C 13098, adult male, Kaburuang (Talaud Is., Indonesia), collected 10 Nov 1893 by C.W. Cursham; wing 244, tail 178, bill to skull 26.6, tarsus 72.5.]
[PARATYPES. - SMTD C 13099, adult female, collected with the type; BMNH 98.4.29.24, unsexed adult, Kaburuang, collected 16 Nov 1893 by Cursham; BMNH 1930.2.15.1, subadult female, Karakelong (Talaud Is), collected 26 Aug 1896 by an unknown collector, as well as BMNH 97.5.12.22, BMNH 97.5.12.23, SMTD C 15419, SMTD C 15421-15422, and ZMB 32283, all unsexed adults from Karakelong taken "autumn 1896".]

[**Megapodius freycinet oustaleti** Roselaar, 1994a: 27]

[HOLOTYPE. - RMNH 87336 ('*M. freycinet* cat. nr. 50'), adult male, Sorong I. (W Vogelkop Peninsula, Irian Jaya, Indonesia), collected 28 Nov 1864 by H.A. Bernstein; wing 207, tail 72, bill to skull 29.8, tarsus 63.]
[PARATYPES. - RMNH 87337 ('*M. freycinet* cat. nr. 53'), subadult male, Sorong I, collected 11 Sep 1864 by Bernstein; RMNH 87338 ('*M. freycinet* cat. nr. 48'), adult female, Salawati (W Irian Jaya), collected 1 Mar 1865 by Bernstein; RMNH 87339 ('*M. freycinet* cat. nr. 49'), adult male, Salawati, collected Jan 1877 for A.A. Bruijn; BMNH 81.5.1.5666, adult male, Sakamun I. off Salawati, collected 11 Jul 1868 by D.S. Hoedt, ex J. Gould coll.]

TURNICIDAE

Turnix suscitator kuiperi Chasen, 1937: 208

PARATYPE. - ZMA 47874, adult female, Tjangkok (W Belitung, Indonesia), collected 19 Mar 1937 by F.J. Kuiper (coll. nr. 496), ex Van Marle coll. nr. 874; wing 92.5, tail 32.5, bill to feathers 14.8, tarsus 27.2.
PARATYPE. - ZMA 47875, adult male, Tjangkok, collected 9 Mar 1937 by Kuiper (coll. nr. 484), ex Van Marle coll. nr. 875; wing 84.5, tail absent, bill to feathers 12.0, tarsus 23.4.
PARATYPE. - ZMA 47929, adult male, Tjangkok, collected 13 Mar 1937 by Kuiper (coll. nr. 488), ex Van Marle coll. nr. 929; wing 82.5, tail 26, bill to feathers 11.6, tarsus 23.2.

The holotype is an adult female from Gunung Liang (Belitung), collected 9 Feb 1936 by F.J. Kuiper, then in the MZB (nr. 16329), now in the RMNH (nr. 14029); wing 90.

Chasen (1937, published December) mentions 14 paratypes, all taken by Kuiper in 1935-1937 and forming part of his collection: seven males with wings 81, 82, 82, 82, 83, 83, and 83 mm, five females with wings 85, 86, 89, 89, and 89 mm, and two unsexed birds with wing 85 and 90 mm (Chasen, 1937; undoubtedly, another measuring method was used than employed above).

Of these paratypes, three are in the ZMA, obtained by Van Marle directly from Kuiper with ca. 50 other Belitung birds, another is in the RMNH (cat. nr. 2, female, collected 13 Mar 1937 at Tjangkok, obtained from Van Marle). The other 10 paratypes are probably in the MZB or in Kuala Lumpur.

The upperparts of this subspecies are considerably darker than in nominate *suscitator* from Java and S Sumatra or *atrogularis* from N Sumatra and W Malaysia, and the wing and underparts are less buffish; they agree with nominate *suscitator* in the rufous barring of the underparts, which tends to form an indistinct collar on the upper breast of the female, but differs from it in the heavier and more extensive black barring of the underparts (Chasen, 1937).

CHARADRIIDAE

[**Pluvialis squatarola tomkovichi** Engelmoer & Roselaar, 1998: 86]

[SYNTYPES. - ZISP 12213, adult male, Wrangel I. (NE Siberia, Russia), collected 26 Jul 1939; wing 210, tail 72, bill to feathers 29.4, bill depth at gonys angle 6.9, tarsus 46.4; and ZISP 12230, adult female, Wrangel I., collected 12 Jun 1939; wing 218, tail 74, bill to feathers 27.7, bill depth at gonys angle 6.9, tarsus 47.2.]
[PARATYPES. - 19 other males and eight other females examined from Wrangel I., collections not stated.]

This subspecies has the longest wing of all populations, but its bill and tarsus are (rather) short. See Engelmoer & Roselaar (1998) for further details on this and the following wader taxa.

SCOLOPACIDAE

[**Calidris maritima belcheri** Engelmoer & Roselaar, 1998: 141]

[HOLOTYPE. - CM 122 627, adult male, Belcher Is. (56°30'N 78°00'E, E Hudson Bay, Canada), collected 28 Jun 1938; wing 122, tail 54, bill to feathers 29.0, tarsus 21.3.]
[PARATYPES. - 11 other males and 11 females examined from the Belcher Is.; collections not stated.]

This subspecies is distinctly smaller than the other races.

[**Limosa baueri** Naumann, 1836: 429]

[Current name: *Limosa lapponica baueri*]

[HOLOTYPE. - NMW 40990, subadult (probably one-year-old), sex unknown (female according to measurements), Norfolk I. (Tasman Sea, Australia), collected 21 Sep 1804 by F.L. Bauer (Schifter, 1992); wing 235, bill to feathers ca. 110, tarsus ca. 62 (data provided by Dr E. Bauernfeind).]

A neotype for the name *baueri* was designated in Engelmoer & Roselaar (1998), an adult obtained on the breeding grounds, but this is an invalid action, not supported by the Code of Zoological Nomenclature, as the original type, an oversummering subadult from the winter quarters, is still in existence. The selected neotype was: MVZ 60467, adult male, Cape Etolin (Nunivak I., off W Alaska, U.S.A.), collected 3 Jun 1931; wing 226, tail 73, bill to feathers 83.4, tarsus 53.8.

Baueri is the largest of all subspecies of *Limosa lapponica*, breeding in Alaska; it is as dark as *anadyrensis* on the upper tail-coverts and axillaries, but the wing-tip is more elongated, and the secondaries are relatively shorter.

[**Limosa lapponica anadyrensis** Engelmoer & Roselaar, 1998: 197]

[HOLOTYPE. - ZISP 45871, adult female, Markovo (64°40'N 170°24'E, Magadan region, E Russia), collected 3 Jun 1897; wing 244, tail 79, bill to feathers 106.4, tarsus 57.7.]
[PARATYPES. - 16 males and six further females examined from Anadyrland and the shoreland of S Chukotsk Peninsula, collections not stated.]

The upper tail-coverts and axillaries of this NE Siberian subspecies are heavily marked, and it is the darkest of all subspecies together with *baueri*; differs from *menzbieri* of E-C Siberia in slightly larger size and more heavily marked tail-coverts and axillaries; smaller than *baueri* from Alaska and with slightly blunter wing-tip.

According to Tomkovich & Serra (2000), the label of the holotype has probably been exchanged for that of another bird of unknown provenance, and moreover Markovo does not fall within the breeding range of the species, making the status of this taxon dubious.

[**Limosa lapponica taymyrensis** Engelmoer & Roselaar, 1998: 197]

[HOLOTYPE. - ZISP 45805, adult male, Lake Taymyr (74°35'N 103°E, Taymyr Peninsula, N Krasnoyarsk region, C Russia), collected 8 June 1843; wing 215, tail 65, bill to feathers 80.0, tarsus 49.7.]
[PARATYPES. - 40 further males and 29 females examined by the authors, collections not stated, but originating from the breeding grounds from the Yamal to the Taymyr Peninsula, NW Siberia.]

This subspecies is the smallest one, though the female differs little in size from nominate *lapponica* (breeding in N Fenno-Scandia); upper tail-coverts and axillaries are lightly marked, as nominate *lapponica*.

COLUMBIDAE

[**Treron vernans parva** Kloss, 1931: 308]

A taxon based on two syntypes, both adult male, from Deli (NE Sumatra, Indonesia), collected by A.F.C.A. van Heijst, then in the MZB (coll. nrs. 5978-5979). One of these is now in the RMNH (coll. nr. 14025, ex MZB 5978) and is listed as holotype in Van den Hoek Ostende et al. (1997).

Though the ZMA has ca. 670 skins from Van Heijst from the Deli area (his coll. nrs. 1580 to 1999, dating from Apr-Nov 1919, and coll. nrs. 1-ca. 300, dating from Nov 1919 to Mar 1920), the part of his collection with *Treron vernans* is not in the ZMA, but largely in the Museum of Kuala Lumpur (which has ca. 1600 skins of Van Heijst: Robinson & Kloss, 1920). The ZMA has no paratypes of this form.

Treron pompadori dehaani Voous [in] Van Bemmel & Voous, 1951: 97

Current name: *Treron pompadori griseicauda*

HOLOTYPE. - ZMA 8703, adult male, Butung I. (off SE Sulawesi, Indonesia), collected Aug 1909 by Mohari (coll. nr. 75) for Mr Elbert; wing 154, tail 86, bill to feathers 16.3, tarsus 24.6.
COTYPE. - ZMA 8704, adult female, Butung, collected Aug 1909 by Mohari (coll. nr. 73) for Elbert; wing 148.5, tail 80.5, bill to feathers 16.2, tarsus 23.8.
PARATYPE. - ZMA 8605, adult male, Labasa (Muna I., off SE Sulawesi), collected 3 Oct 1948 by G.A.L. de Haan (coll.

nr. 591); wing 152, tail 92, bill 16.2, tarsus 23.1, weight 191 g.
PARATYPE. - ZMA 47909, adult male, Butung, collected 20 Sep 1948 by De Haan (coll. nr. 421), ex Van Marle coll. nr. 961; wing 153.5, tail 86.5, bill 15.8, tarsus 23.1.
PARATYPE. - ZMA 47910, adult, 'probably male', Butung, collected 23 Sep 1948 by De Haan (coll. nr. 460), ex Van Marle coll. nr. 910; wing 155, tail 88, bill 15.2, tarsus 25.4, weight 172 g.
PARATYPE. - ZMA 47911, adult male, Butung, collected 24 Sep 1948 by De Haan (coll. nr. 475), ex Van Marle coll. nr. 911; wing 150.5, tail 86, bill 15.2, tarsus 24.9, weight 174 g.
PARATYPE. - ZMA 47961, adult female, Labasa, collected 3 Oct 1948 by De Haan (coll. nr. 590), ex Van Marle coll. nr. 961; wing 146.5, tail 89.5, bill 15.2, tarsus 22.0, weight 183 g.

ZMA 47910, labeled as 'probably male', is listed as female by Van Bemmel and Voous (1951). The original series consisted of 11 birds; next to the seven birds listed above, one male and three females collected by Elbert on Muna in Jul-Aug 1908 were included, of which two are in the SMF and the two others probably in the MZB.

The race was diagnosed as showing a paler grey crown in both sexes than in birds from mainland Sulawesi, with stronger yellow-green suffusion to feather-tips, next to slight differences in the green-yellow tinge of the underparts. In large series examined from the type locality and from Sulawesi (RMNH, ZMA), crown- and belly-colour appear to be strongly affected by bleaching and abrasion, without any geographical component, and accordingly *dehaani* is not recognized here.

PSITTACIDAE

Eclectus cornelia Bonaparte, 1849: 142

Current name: *Eclectus roratus cornelia*

HOLOTYPE (?). - ZMA 261, adult female, undated, ex coll. Amsterdam Zoo; wing 260, tail 150, bill 39.4, tarsus 27.5.

The bird was described from a single bird living in the Amsterdam Zoo and named after the wife of H. Schlegel of the RMNH; it was said to be from "the Moluccas, most probably from Ceram"; wing 8.75 inch [222 mm], tail 5.5 inch [140 mm] (Bonaparte, 1849). The friendly behaviour of the bird when it was handled in order to make a description is extensively described.

After death, the bird was apparently not sent to the RMNH (no birds of this taxon are present there), but retained in the ZMA. The single bird now present in the ZMA does not indicate its type status (in fact, not unusual, as many birds lack data on this), and as the socle of the dismounted bird has been removed long since, no original notes can be compared. Judged from the make of the mount, the female certainly dates back from the 1860-s, and it closely agrees with the plate presented by Bonaparte (1849).

The Zoo had two female birds of this taxon in the distant past, first the type which "survived for many long years", followed by another which "died recently" (Finsch, 1868). One bird was alive in early 1863 (Finsch, 1863), but it is unclear whether this was the type or the second bird. The measurements of the type as supplied by Bonaparte and those taken of ZMA 261 at present do not agree very well; however, Bonaparte's and our present measuring techniques differ, e.g., the wing/tail ratio of Bonaparte's *cornelia* is 1.58, far from the usual 1.8-2.2 of various other taxa of *E. roratus*, and Bonaparte's wing length is certainly too short for this taxon: compare the data in Forshaw (1973).

This rare large-sized *Eclectus*-parrot is now known to be confined to Sumba.

Psittacodis westermani Bonaparte, 1850a: 4

Current name: *Eclectus roratus westermani*

SYNTYPE (?). - ZMA 280, adult male, 'Moluccas', from the Artis-Zoo collection, died at an unknown date (before 1860); wing 222, tail 106, bill to feathers 37.5, tarsus 24.0.

The taxon was described from a live bird (or birds) present in 1850 in the Zoological Garden of the Zoölogisch Genootschap Natura Artis Magistra (the predecessor of the present-day ZMA and Artis-Zoo), without details of origin. It was named after the Society's first director, G.F. Westerman (1807-1890).

According to ZMA archives, the Zoo has had four live adult males of this species between 1850 and 1859; the number on show in 1850 is unknown, but the last bird certainly died in 1859. It is not clear which of the two skins remaining at present in the RMNH and ZMA was or were seen by Bonaparte in 1850, or whether the live bird(s) of 1850 has/have been lost. Thus, the des-

ignation as a holotype of RMNH 88013 (Finsch, 1868; Van den Hoek Ostende et al., 1997) for an adult male died in the Amsterdam Zoo at 9 Dec 1858 is far from certain, and the bird now present in the ZMA may equally well be the type.

The origin of this subspecies is still unknown and it is likely to be extinct. Males are close to nominate *roratus* from the southern Moluccas, showing similar red underwing and axillaries, a narrow and ill-defined yellow tail-tip, and a cerulean-blue wing-bend, but differ by the absence of red on the flanks and by considerably smaller size; females are close to nominate *roratus* but differ also in size, have a duller blue nape-collar, dull purple-blue rather than bright blue belly, darker and duller red under tail-coverts, and have no blue feathers round the eye (Rothschild, 1899).

This taxon is only known from the zoo specimens referred to above, from single mounted males in the collections of the Museum Heineanum (Halberstadt, Germany) and of Major Kirchhoff (Finsch, 1868) (one may wonder whether these derived from the Amsterdam Zoo), and from 10 live specimens of unknown origin imported in London shortly before Oct 1899 (Rothschild, 1899). Of the 10 latter specimens, six were males, four females; at least two males and one female of this group died and were discarded, but Rothschild bought the remainder (dead or alive). No further specimens are known; Forshaw (1973) managed to measure and examine eight males and three females (which included the males in RMNH and ZMA). Peters (1937), apparently unaware of Rothschild's article, still maintained that *westermani* was known only from a few males and suggested that it was just an aberrant of *riedeli*, the form of the Tanimber Islands, which is equally small. However, this latter taxon differs strongly from *westermani* in showing a red belly rather than a purple-blue one in the female and a broad and contrasting ca 2 cm wide yellow tail-tip in both sexes.

With size comparable to *riedeli* from Tanimber and colour close to nominate *roratus* from Buru, Ceram, and the nearby islands, *westermani* may be a form once living on the islands between Tanimber and Ceram, e.g., on the Tayandu, Watubela, or Gorong groups (though on Gorong and Kur of the Tayandu group the large *polychloros* from Kai and New Guinea has been collected, probably deriving from escapes), or once living on the Sula group west of the Moluccas.

Alternatively, *westermani* may have lived in some of the eastern Lesser Sunda Islands, from Flores and Timor east to Damar and Babar, at present not known to be inhabited by the species, but one would suppose it should then more closely resemble *cornelia* or *riedeli* in plumage.

Lophochroa leari Finsch, 1863: xxiii

Current name: *Cacatua ducorps*

HOLOTYPE. - ZMA 143, unsexed, ex Amsterdam Zoo, died in or before 1871; wing 265, tail 125, bill 31.6, tarsus 22.8, crest length ca. 57 mm.

Described from a bird living in the Amsterdam Zoo in May 1863. According to the original description (Finsch, 1863), close to *Lophochroa (Cacatua) sanguinea* from Australia, agreeing in the feathered nostrils, yellow basal inner webs of flight- and tail-feathers, pink bases to feathers of head, and whitish bill, but crest feathers longer and with more broadly rounded tips, lore white instead of pink-red, and bare eye-ring blue instead of almost white.

Apparently, the *'sanguinea'* with which Finsch compared his *leari* was the single bird from Tanimber labelled as *'sanguinea* from Australia' in Leiden (see below). At the time of description, the bird was not compared with *ducorps* which was not available then. However, Finsch examined live *C. ducorps* shortly afterwards in London, and put the name *leari* already in the synonymy of *ducorps* in Finsch (1867).

C. ducorps is restricted to the Solomon Islands.

The holotype of *leari* was registered by Voous as *Ducorpsius goffini* in the ZMA collection book, a proof that the members of the *Cacatua sanguinea-ducorps-goffini* group are sometimes difficult to identify (a fact enhanced by the scarcity of specimens of known origin, e.g., up to at least 1874, even the RMNH had only a single *'sanguinea'* from this whole group, which also was the type of *'goffini'* Finsch, 1867: Schlegel 1874). The ZMA has three other specimens of *ducorps*, the two birds cited under *L. goffini* (below), and ZMA 96 (wing 273, tail 132, bill 34.2, tarsus 22.0, crest length ca. 65 mm), which was originally labelled as *C. sanguinea* and said to be from Australia;

though very old, this specimen was apparently not examined by Finsch as he did not mention it.

Lophochroa goffini Finsch, 1863: xxiii

Current name: *Cacatua ducorps*

SYNTYPE. - ZMA 141, adult female, ex Amsterdam Zoo, dead in or before 1871; wing 268, tail 126, bill 29.9, tarsus 22.0, crest absent.
SYNTYPE. - ZMA 142, adult, sex unknown, ex Amsterdam Zoo, dead in or before 1871; wing 261, tail 128, bill 27.7, tarsus 20.8, crest length ca. 53 mm.

Described from two birds living in the Amsterdam Zoo in May 1863. According to the original description (Finsch, 1863), this taxon is close to *leari* (see above), but it differs in smaller size and by showing a yellow base to the underside of the crest-feathers. At present, the yellow at the base of the crest of ZMA 142 is hard to see, being even less developed than the slight yellow wash of the two *ducorps* birds referred to under *L. leari* above; the yellow of the other bird was more extensive but the crest is absent at the moment probably due to too frequent checking. As noted by Finsch (1863), both birds are smaller than the *leari* mentioned above, but in fact this is only apparent in bill size, a character which is probably due to a difference between the sexes; they are distinctly larger than the *Cacatua* living on Tanimber to which the name *C. goffini* is usually attributed, and have blue rather than white eye-rings and white instead of pink lores, perfectly fitting the data of *C. ducorps* as supplied by Forshaw (1973), and, apart from the smaller bill, are close to the two *C. ducorps* cited above under *leari*. Therefore, we consider *goffini* to be a younger synonym of *C. ducorps* Bonaparte, 1850a.

Though still referring to the two birds from the Amsterdam Zoo, Finsch selected a [neo] type from the RMNH for his taxon *goffini* later on (Finsch, 1867), perhaps because he was aware that after examination of *ducorps* in London the Amsterdam *leari* and *goffini* could no longer stand. This neotype was an adult female from the Rotterdam Zoo that died 8 Sep 1864 (at present, RMNH coll. nr. 87994: Van den Hoek Ostende et al. 1997), labelled by Schlegel (1864) as *C. sanguinea* from Australia (to add to the confusion). The designation of a neotype is an invalid action, as the two types of *goffini* were in existence (though still alive), and the name *Plictolophus goffini* Finsch, 1867, is preoccupied by *Lophochroa goffini* Finsch, 1863, a junior synonym of *C. ducorps* (both *Plictolophus* and *Lophochroa* are junior synonyms of *Cacatua*, a name considered invalid by Finsch). The Tanimber taxon of cockatoo formerly known as *C. goffini* being unnamed now, a new name is proposed:

Cacatua tanimberensis nom. nov.

HOLOTYPE. - RMNH coll. nr. 87994, an adult female from the Rotterdam Zoo, died in captivity 8 Sep 1864.

The holotype has pink-red lores and much pink at the base of the crest- and head-feathers, the pink being partly visible on the cheeks; it is closely similar to *C. sanguinea*, but differs from the latter by a more restricted bluish-white patch round the eye (large and deeper blue in *C. sanguinea*) and in small size: wing of the holotype 210 and tail 115, against wing 226-288 and tail 105-160 in *C. sanguinea* (Schlegel, 1864; Büttikofer, 1886; Forshaw, 1973; Mees, 1982). For further remarks see *Lophochroa goffini* Finsch, 1863.

ETYMOLOGY. - Named after the islands on which it is endemic. This is in line with the use of the English name Tanimber Corella by Coates & Bishop (1997), and, by using Corella rather than Cockatoo, stresses its close relationship to the Australian Corella *C. sanguinea* from Australia and southern New Guinea.

[**Coracopsis melanorhynchus** Finsch, 1863: xx]

[Current name: *Coracopsis vasa vasa*]

[SYNTYPES. - In ZMA: apparently lost.]

Described from two birds living in the Amsterdam Zoo in May 1863, of unknown origin, diagnosed as an entirely black-brown parrot, similar to *C. vasa*, but with the bill black instead of white and with the tail slightly furcated rather than rounded (Finsch, 1863).

The ZMA has two old adult birds of *Coracopsis vasa*, one dating from before 1870 from 'Madagascar' (but eventually from the Zoo; ZMA

930), the other from the Zoo (died on 14 Oct 1888; ZMA 929), but it seems unlikely that these are the syntypes: the tail is rounded, not forked, the bill is pale, not dark, and the birds belong to pale subspecies *drouhardi* rather than to the blackish nominate *vasa*. As tail shape and bill colour appear to depend on moult status (Salvadori, 1891), the first two characters may not be valid, but one would expect that Finsch would note the pale grey-brown and ash-grey colours as compared with the blackish nominate race.

The ZMA has one bird which has the characters of *melanorhynchus* (blackish plumage, black bill, outer tail-feather ca. 1 cm longer than central tail-feather), viz., an unregistered ZMA male which died in the Zoo on 14 Mar 1925 (wing 306, outer tail-feather 223, bill to cere 38.5, tarsus 31.3), but this date seems far too late to suggest that it is one of the syntypes. No types are in the RMNH (Van den Hoek Ostende et al. 1997).

Coracopsis barklyi Newton, 1867: 346

Current name: *Coracopsis nigra barklyi*

SYNTYPE (?). - ZMA 932, adult male, Praslin I. (Seychelles), collected in or before 1871, collector not stated; wing 199, tail 126, bill to feathers 24.2, tarsus 21.0.

When describing this new taxon, Newton had three skins available from Praslin I., collected by himself in Jan-Feb 1867 (now in CUMZ: Benson, 1999), as well as an unspecified number of live birds in the London Zoo presented by S. Ward (Newton, 1867); of these latter, one which died after three years is in the BMNH (coll. nr. 1870.4.19.1: Warren, 1966).

The bird in ZMA, according to the handwriting on the label obtained as skin from G.A. Frank jr. in London, came also from captivity, as it shows some wear of claws and tail-tips which is typical for captive birds. Seeing its locality, arrival date, and provenance, it very likely also formed part of the original series of live Zoo birds.

[**Nanodes musschenbroekii** Schlegel, 1873: 34]

[Current name: *Neopsittacus musschenbroeki*]
An old bird, coll. nr. 817, received from the dealer G.A. Frank (Amsterdam) in 1870 or shortly afterwards, thus at about the same time that the birds reached Schlegel, is in the ZMA. It is probably not a paratype, as Schlegel (1873) clearly states in the original description that he had three specimens, and these three syntypes are still in the RMNH (coll. nrs. 88032-4, from Hattam, Arfak Mts., dated 7, 11, & 14 Apr 1870: Van den Hoek Ostende et. al., 1997). Apparently, Schlegel dismissed from part of the specimens he had received, without mentioning them in the type description, trading them by means of Frank or other dealers.

The same apparently has happened with *Psittacella brehmii*, ZMA 910, also bought from Frank at about the same time that Schlegel described the latter bird. Many other birds in the ZMA collection may have a similar status.

Psitteuteles weberi Büttikofer, 1894: 290

Current name: *Trichoglossus haematodus weberi*

SYNTYPE. - ZMA 32100, adult female, Endeh (Flores, Indonesia), collected early Jan 1889 by M. Weber (without coll. nr.); wing 120, tail 82, bill to feathers 19.1, tarsus 16.2.

Büttikofer (1894) lists five syntypes, all taken on Flores in Nov-Dec 1888 by Max Weber (the first director of the ZMA): two from Reo (Weber's coll. nrs. 12 & 12a), one from Bari (coll. nr. 495), and two from Endeh (without coll. nr.). Four of these are in the RMNH (nrs. 88130-88133), the other one is in the ZMA, listed above.

Lorius cyanauchen viridicrissalis De Beaufort, 1909: 403

Current name: *Lorius lory viridicrissalis*

SYNTYPE. - ZMA 209, adult male, surroundings of Lake Sentani (SW of Jayapura, N Irian Jaya, Indonesia), collected 8 Apr 1903 for L.F. de Beaufort; wing 168, tail 101, bill to feathers 29.0, tarsus 24.7.
SYNTYPE. - ZMA 210, adult female, surroundings of Lake Sentani, collected Apr-Jun 1903 for De Beaufort; wing 170, tail 96, bill to feathers 26.3, tarsus 21.3.

The type series consisted of eight syntypes, collected in Apr-Jun 1903 for De Beaufort: a juvenile from the 'Humboldt Bay area' taken 21 Apr (coll. nr. 165), two adult males and four adult females

collected Apr-June in the same area (coll. nrs. 55-57, 99, 374, 376), and an adult from the Tami River presented by a native collector (coll. nr. 316) (De Beaufort, 1909). Van den Hoek Ostende et al. (1997) list six syntypes for the RMNH, but do not cite De Beaufort's collection numbers for these; as can be judged from dates and localities, De Beaufort's first- and last-mentioned birds are in the RMNH, as are three females and one male of the others, here cited as being from Lake Sentani (rather than from the Humboldt Bay area as in the original description). The remaining pair is in the ZMA.

This taxon differs from the closely related *salvadorii* mainly in the verditer-blue rather than dark blue under tail-coverts and in the darker blue hindneck, which is more blackish blue.

TYTONIDAE

Phodilus badius parvus Chasen, 1937: 216

PARATYPE. - ZMA 47867, adult female, Kampong Ajer Saga (Belitung, Indonesia), collected 3 Feb 1937 by F.J. Kuiper (coll. nr. 464), ex Van Marle (coll. nr. 867); wing 185, tail 76, bill to cere 20.4, tarsus 40.0.

The holotype is in the RMNH, no. 14021, adult female, Kampong Ajer Saga (Belitung), collected 5 Nov 1935 by F.J. Kuiper, then MZB 16315; wing 176. Chasen (1937, published December) lists seven paratypes, all collected by Kuiper on Belitung in 1935-1937: one male (wing 171 mm) and six females (wing 172, 175, 176, 179, 180, and 180 mm), but does not explicitly say in what collections they are; as in *Turnix suscitator kuiperi*, above, Chasen's measurements are not quite comparable with ours.

As the RMNH has only the holotype, the remaining paratypes are probably in the MZB and/or Kuala Lumpur. This subspecies is considerably smaller than nominate *badius* from Java (in a large sample of the latter, wing of male 180-190, female 180-196) or Sumatra (wing of three females 195-199, four males 182-192) (Chasen, 1937; coll. ZMA).

STRIGIDAE

[**Strix leptogrammica chaseni** Hoogerwerf & De Boer, 1947: 140]

[PARATYPE (?). - ZMA 47766, adult male, Gunung Tadjem (300 m, C Belitung I, Indonesia), collected 6 Jan 1937 by F.J. Kuiper (coll. nr. 446), ex Van Marle (coll. nr. 766); wing 311, tail 167, bill to cere 22.4, tarsus ca. 54.]

Hoogerwerf & De Boer (1947) based this new taxon on four birds collected by Kuiper in 1935-1937 on Belitung, present in the MZB in Sep 1944; one of these 4, the holotype, is now in the RMNH (nr. 14020, formerly ZMB nr. 16324, adult male, taken Penjabin Mine, W Belitung, on 30 Apr 1936) (Van den Hoek Ostende et al. 1997). In contrast to the birds of Kuiper described as new by Chasen (1937) (see *Phodilus* and *Turnix*, above), we have no certainty that the entire series of Kuiper of this owl was examined. Likely, only the birds then present in the MZB were seen, and not any taken back home by Kuiper. Hence, ZMA 47766 is very probably not a paratype.

This form is sometimes not recognized (e.g., Mees, 1986), but in fact is quite distinct. It is closer to Bornean nominate *leptogrammica* than to *myrtha* from Sumatra, but differs from the former by its rufous-black rather than fuscous-black cap; broader, deeper, and more well-defined tawny-rufous collar; brighter tawny-rufous barring on upperparts, upper wing, and tail, equal in width to the dull black intervening bars (not narrow and tawny-buff); ca. 5-8 mm wide rufous bands on the primaries, fewer in number, and not interrupted by black at the shafts (4-5 mm wide, more numerous, and frequently interrupted in nominate *leptogrammica*); an uniform deep rufous breast-shield, extending from upper throat to upper belly (brighter and more extensive than in nominate *leptogrammica*); rufous-brown bars on belly instead of dull black. The barring of *myrtha* is generally much finer, paler, more buff, and more wavy (less straight), and the rufous collar and breast-shield are pale, buffish, very restricted in extent, and largely obscured by dusky barring.

ALCEDINIDAE

[**Tanysiptera carolinae** Schlegel, 1873: 13]

[SYNTYPE. - ZMA —, adult female, Mafoor I. (= Numfor, Geelvink Bay, Irian Jaya, Indonesia), collected 23 Jan 1869 by C.B.H. von Rosenberg, ex Cabinet Temminck no. 119. Now lost.]

Of the original series of 26 birds available to Schlegel when describing this taxon (all from Mafoor, collected by Von Rosenberg 21 Jan to 1 Mar 1869), 24 are still present in the RMNH, while RMNH cat. nr. 6 (male, 11 Feb 1869) and RMNH cat. nr. 11 (female, 23 Jan 1869) are stated to be missing (Van den Hoek Ostende et al. 1997). The latter bird, a mount, has undoubtedly been exchanged with the ZMA, where its label is still preserved, but where the bird itself can not be traced. According to K.H. Voous (pers. comm.), it was stolen, a fate shared with some 100 other (mostly colourful) birds. It has been present in the ZMA from at least the end of the 19th century until the early 1950-s.

[**Ceryle rudis syriaca** Roselaar, 1995: 22]

[HOLOTYPE. - RMNH 88859 (cat. nr. 17), adult female, collected 'Syria', received from Maison Verreaux in 1863; wing 151, tail 81, bill to skull 60.8, tarsus 11.3.]
[PARATYPE. - RMNH 88860, adult male, 'Syria', also from Maison Verreaux in 1863; wing 149, tail 81.5, bill to skull 59.6, tarsus 11.0.]
[OTHER PARATYPES (coll. nrs. not noted). - In ZFMK, an adult male from Mohammera (SW Iran) collected 12 Feb 1904 (wing 146.5, tail 76, bill to skull 55.8, tarsus 11.1); in ZMM, an adult male from Adalia (= Antalya, S Turkey) collected 22 Apr 1874 (wing 145.5, tail 81, bill to skull 64.6, tarsus 11.3), and 27 adult birds in the BMNH from the following localities: (1) from Turkey: Izmir (an undated female), Antalya (two females 17-22 Dec 1874), and Harpara (a male Jan 1874); (2) from Cyprus: Larnaka (a pair 3 Feb 1906); (3) from Lebanon: Tyr (an undated female); (4) from Israel: 'plains of Genezaret' [near Lake Tiberias] (four males 2-4 Apr 1864); (5) from Jordan: Amman (a pair from 12 Oct 1922); (6) from Iraq: Al Faw (two females, one undated, one 18 Oct 1886), Al Qurnah (male 29 Jul 1921), Qalat Salih (male 26 May 1918), Baghdad (an undated female), Baqubah near Baghdad (female 10 Dec 1922), and 'Iraq' (three undated females); (7) from SW Iran: Shiraz (an undated female), Shush (male 19 Mar 1903), Telespid (female 12 Jun 1902), and 'Changulac & Chankay rivers' (Lorestan; male 4 Oct 1921, female 17 Oct 1921).]

For measurements of these birds and other characters of this subspecies, see Roselaar (1995). Other birds in the BMNH from the Middle East are juvenile or are first winter birds with juvenile wing, e.g., one from Lake Tiberias, one from Ghor near Jericho, three from Al Qurnah, one from the Ahvaz area, and one from Mishun; these were not included in the type series.

BUCEROTIDAE

Aceros cassidix brevirostris Van Bemmel [in] Van Bemmel & Voous, 1951: 56

HOLOTYPE. - ZMA 8701, adult male, Labasa (Muna I., off SE Sulawesi, Indonesia), collected on 6 Oct 1948 by G.A.L. de Haan (coll. nr. 625); wing 406, tail 274, bill to front of casque 131, to rear base of casque 238, tarsus ca. 61.5.
PARATYPE. - ZMA 9275, adult male, Labasa, collected on 9 Oct 1948 by De Haan (coll. nr. 664); wing 410, tail 278, bill to front of casque 120, to rear base of casque 220, tarsus ca. 58.
PARATYPE. - ZMA 9276, adult female, Labasa, collected on 9 Oct 1948 by De Haan (coll. nr. 661); wing 377, tail 247, bill to front of casque 97, to rear base of casque 178, tarsus distorted.
PARATYPE. - ZMA 9277, adult female, Butung I. (off SE Sulawesi, Indonesia), collected on 25 Sep 1948 by De Haan (coll. nr. 505); wing 388, tail 263, bill to front of casque 103, to rear base of casque 187, tarsus ca. 58.

Next to the type, the original series examined consisted of 10 males and six females, collected on both Muna and Butung by J. Elbert in Jul-Aug 1909 and by G.A.L. de Haan in Sep-Oct 1948.

Elbert's five birds are probably all in the MZB, as none of the Elbert birds in SMF appear to have been examined; of De Haan's other 11 birds, three are in the ZMA (listed above) and the remainder apparently in the MZB.

Van Bemmel & Voous (1951) list biometrical data for some Sulawesi populations of this species, and based on this, Kemp (1988) concluded that the variation was clinal and *brevirostris* invalid; however, the data from populations from the centre, south, and south-east of Sulawesi presented by Van Bemmel & Voous (1951) are very sparse, and the few birds from here still seem to match nominate *cassidix* in size or are close to it, the alleged clinal variation being doubtful.

PICIDAE

Picus westermani Blyth, 1870: 163

Current name: *Dendrocopos macei westermani*

HOLOTYPE. - ZMA 1940, adult male, 'Himalayas', date and collector unknown, acquired by G.F. Westerman, the director of the Royal Zoological Society 'Natura Artis Magistra' (the predecessor of the ZMA); wing 114.5, tail 68, bill to feathers 26.0, tarsus 20.2.

Though synonymized with nominate *macei* in Ali

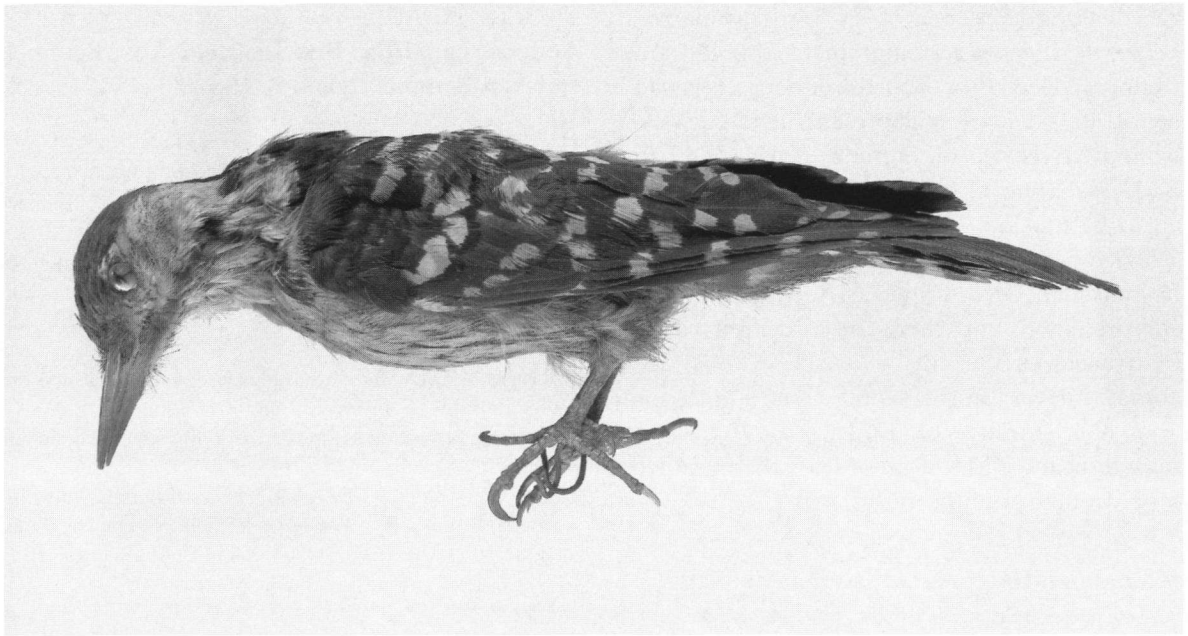

Fig. 2. Holotype of *Picus westermani* Blyth, 1870 [now *Dendrocopos macei westermani*]: ZMA 1940, adult male, 'Himalayas', collecting date and collector unknown. © L. van der Laan, ZMA.

& Ripley (1970), a good race according to Ticehurst (1928), which is supported by birds examined in ZMA and RMNH: measurements of 15 birds of the W Himalayas and many topotypical *macei* from the C & E Himalayas show a strong divergence, with wing of male in the west 113-118, bill 27-30, and wing of male *macei* in the centre and east 100-109 (a few to 113), bill 22-26 (Ticehurst, 1928). As the wing of the type of *westermani* is 117.5 mm according to the original description, it is certainly a representative of this larger-sized western population, which thus should bear the name *westermani* (Ticehurst, 1928).

Though the holotype is actually not as large as Ticehurst suggested (see above), its plumage and that of other W Himalayan birds shows broader white bars on the upperparts than typical *macei* from Nepal, Darjeeling, and Sikkim, a narrower and shorter black malar stripe, and strongly reduced or obsolete dark barring on the flanks.

ALAUDIDAE

[Eremophila alpestris kumerloevei Roselaar, 1995: 23]

[HOLOTYPE. - BMNH 1890.1.29.56, adult male, Bereketlü (near Çamardi, E Taurus Mts., Turkey), collected 30 April 1876 by C.G. Danford; wing 118.5.]

[PARATYPES. - BMNH 1879.4.5.58, adult male, collected with the type, wing 121; also (coll. nrs. not noted): (1) in BMNH, one adult male from Galatia near Uludag collected 16 Apr 1879 (wing 119.5), one adult female from Elma Dag near Ankara taken 21 May 1860 (wing 108), and three adult males and two adult females from Eregli collected 24-29 Jan 1908 (wing resp. 119, 120, 121, 106, 110.5); (2) in ZFMK, two adult males and one adult female from Uludag, 15-16 Jul 1934 (wing resp. 114, 114.5, and 106).]

This form is restricted to the mountains surrounding the Central Plateau of Asia Minor. Further east in Turkey, it is replaced by the Caucasian race *penicillata*.

CAMPEPHAGIDAE

Oxynotus newtoni Pollen, 1866: 278

Current name: *Coracina newtoni*

SYNTYPE. - ZMA 592, female, Réunion, collected 31 May 1865 by F.P.L. Pollen & D.C. van Dam (coll. nr. 15); wing 99, tail 82, bill to skull 19.5, tarsus 25.2.

SYNTYPE. - ZMA 593, male, Réunion, collected 17 Feb 1865 by Pollen & Van Dam (coll. nr. 14); wing 99, tail 81.5, bill to skull 19.0, tarsus 24.5.

Pollen (1866) does not specifically mention types, nor does he cite the number examined. From his

descriptions it is clear that he had a series, as he had 'males' and 'females'. The birds in the ZMA still wear Pollen's original labels and were in Pollen's hands when he described the taxon. Obviously, they are syntypes. Five further syntypes, collected 4-5 Jan 1865, are in the RMNH.

Some unclearity may arise from the fact that Pollen's paper with the description of the taxon in *Ibis* is signed 'St. Denis, Réunion, 17th February, 1865' (viz, on the exact date that one of our birds was collected, and before the date of collecting of the other). As Pollen reacted in his paper to a note of A. Newton published in the *Ibis* of Oct 1865, and other notes in this issue of *Ibis* (published Jul 1866) show dates between Dec 1865 and Jun 1866, this date is clearly a *lapsus* for 17 Feb 1866.

The ZMA has several other pre-1870 birds from Madagascar and neighbouring islands which may have derived from the voyage of Pollen and Van Dam (see Schlegel & Pollen, 1868), e.g., a pair of *Philepitta schlegeli* (ZMA 80 & 81). These may also be syntypes or paratypes of the species involved, though eventually may have been collected a little later, e.g., by Van Dam in 1869 (specimens from that year are in RMNH and BMNH). As no original labels are attached, it is hard to obtain certainty about their provenance.

Pericrocotus cinnamomeus osmastoni nom. nov.

Pericrocotus cinnamomeus [osmastoni] Snouckaert, 1930: 312

HOLOTYPE. - ZMA 33470, 'female' [but probably a 1st winter male], Port Blair (Andaman Is., India), collected 3 Apr 1905 by B.B. Osmaston, ex Snouckaert coll.; wing 74, tail 73, bill to skull 13.5, tarsus 15.2.

A peculiar case of nomenclatorial confusion. Snouckaert (1930) gives a perfectly valid description of the Andaman bird, and mentions the specimen referred to above as holotype. Then he concludes with: "In case it might be found that a local subspecies could indeed be established, I should like proposing to name it after Mr. B.B. Osmaston who collected the bird", but in fact he does not coin a name. Thus, we have a holotype and a valid description, but no name, though by inference one may suppose that the name *osmastoni* was intended. Pending further research on the characters of the Andaman population and that of the neighbouring mainland, we propose to use as name for the Andaman birds *Pericrocotus cinnamomeus osmastoni* nom. nov.

PYCNONOTIDAE

[**Criniger mystacalis** Wallace, 1863: 28]

[Current name: *Hypsipetes affinis mystacalis*]

[SYNTYPE (?). - ZMA 1844 (= '32297'), sex unknown [female according to measurements], labeled 'Buru 1863', collectors name not stated; wing 104.5, tail 83.5, bill to skull 26.8, tarsus 18.1.]

Seeing the mentioned date (which either is the collecting date or the date of reception) and the year of the description of the taxon, one may conclude that this bird is one of the original series of A.R. Wallace, of which several syntypes are also in the BMNH (Warren & Harrison, 1971). However, Wallace collected his birds in May-Jun 1861 (on the eastern tip of Buru), in what case one may suggest that 1863 was the year of arrival in the ZMA. This could be true, but D.S. Hoedt collected on Buru in 1863 (White & Bruce, 1986), and the bird may have been one of his series.

Another bird of this species in the ZMA, coll. nr. 1747, original label lost and therefore of unknown sex [but male according to measurements] and without date and locality, is not less old than ZMA 1844 and probably was obtained at the same time; wing 111.5, tail 88, bill to skull 27.7, tarsus 20.8.

Pycnonotus snouckaerti Siebers, 1928: 396

Current name: *Pycnonotus bimaculatus snouckaerti*

HOLOTYPE. - ZMA 38155, male, Lake Takengon, Aceh (N Sumatra, Indonesia), collected 8 Apr 1920 by F.C. van Heurn, ex Snouckaert coll.; wing 97, tail 101, bill to skull 18.3, tarsus 22.5.

According to Snouckaert (1922) (who failed to see the distinctness of this taxon, listing it as *P. bimaculatus barat*), Van Heurn also collected another adult male, an adult female, and a juvenile male, which are in RMNH; as these were not examined by Siebers (1928) when describing this subspecies in Buitenzorg (=Bogor, Java), they can not be considered as paratypes. The wing and tail of the

Fig. 3. Unique syntype of *Bombycivora japonica* Von Siebold, 1824, and of *Bombycilla phoenicoptera* Temminck, 1828: ZMA 2461, 'male' [= 1st winter female], collecting date unknown [1816-1823], 'Japan' [Kumamoto or Fukuoka Prefecture, NW Kyushu], ex collection J. Cock Blomhoff. © L. van der Laan, ZMA.

holotype are much larger than those of *P. bimaculatus barat* from C & S Sumatra, and the bird is also much darker in plumage (Siebers, 1928).

BOMBYCILLIDAE

Bombycivora japonica Siebold, 1824: 13
Fig. 3

Current name: *Bombycilla japonica*

SYNTYPE. - ZMA 2461, 'male' [but 1st winter female according to plumage], 'Japan', undated; wing 109.5, tail 45, bill to skull ca. 16.5, tarsus ca. 16.3.

The types came from the provinces Tyko & Tsikuzen (now Kumamoto & Fukuoka prefectures, NW Kyushu), Japan (Siebold, 1824). They were in the collection of Jan Cock Blomhoff, 'Opperhoofd' [chief] of the Dutch trade-post on Deshima I. in Nagasaki Bay (Kyushu, Japan), and taken between 1816 and 1823. Cock Blomhoff (1779-1853) was on Deshima in 1809-1823, interrupted by a stay in captivity in England during 1812-1815 because he refused to give up the trading post to the British Crown (Molhuysen & Block, 1911).

When Von Siebold arrived on Deshima in Aug 1923, he immediately recognized the birds as new and described them in a letter send from Nagasaki to Batavia, where the description (and those of some other animals) was published early in 1924 by the Bataviaasch Genootschap van Kunsten en Wetenschappen (Tjon Sie Fat & Van Vliet, 1990).

No data about the number of types was given by Von Siebold, but Temminck (1828) examined two birds when the collection of Cock Blomhoff had arrived in the Netherlands in 1824 and these are here considered as syntypes. One of the syntypes was apparently a male, as the description provided by Von Siebold is of the male sex; the other bird was also labelled 'male' but is in fact a 1st winter female. This latter bird survived, but the whereabouts of the first bird are unknown. Temminck (1928) apparently hoped that the first bird would be given to the RMNH, as he states that it was there, but for his description of *Bombycilla phoenicoptera* (see below) he only used the female, so obviously the male was not in his possession. At present, no bird in the RMNH dates from before ca. 1840. On the plate in Temminck (1828), the text reads 'mâle' (as on the original stand of the ZMA bird), but the plumage of the bird depicted is that of a 1st winter female; in Temminck & Schlegel (1842), the sex of the bird is correctly stated to be female. The female was

on show at Cock Blomhoff's home in Amsterdam from 1824 onwards, and was donated to the Museum of the Zoological Society 'Natura Artis Magistra' (the predecessor of the ZMA) in or shortly after 1844 (Maitland, 1863), where it still is. The two syntypes are also the syntypes of *Bombycilla phoenicoptera* Temminck, 1828: though Von Siebold (1824) described the male and Temminck (1828) the female, both authors knew of the existence of the other specimen.

Bombycilla phoenicoptera Temminck, 1828: pl. 450

Current name: *Bombycilla japonica*

SYNTYPE. - ZMA 2461; the same bird as referred to above, which is the one depicted in the original description of Temminck (1928).

See the discussion under the previous taxon.

TURDIDAE

Cyanecula suecica robusta Buturlin, 1907b: 79

Current name: *Luscinia svecica svecica*

PARATYPE. - ZMA 42762, adult male, Pokhodsk, 'at 69°04' N on the Kolyma' (Kolyma Delta, N Yakutia, Russian Federation), collected '23 May' [= 5 Jun] 1905 by S.A. Buturlin; wing 76.5, tail 50, bill to skull 17.3, tarsus 27.1.
PARATYPE. - ZMA 42763, adult male, Pokhodsk (Kolyma Delta), collected '25 May' [= 7 Jun] 1905 by Buturlin; wing 76.5, tail 51.5, bill to skull 16.3, tarsus 26.8.

Buturlin published his new taxon in two journals, both published 1907: *Psovaya i Ruzheinaya Okhota* 13 (6), and *Ornith. Monatsberichte* 15 (5). Having no access to the first-mentioned obscure Russian hunting journal, it it difficult to find out which of the two is the earlier publication. The issue of the last-mentioned journal is from May 1907. In here, Buturlin states: "27 full-grown males [of this new form] were examined from the Lower [Nizhnyaya] Tunguska and Monjero [Moyero] rivers east to Anadyr; the types are from the Kolyma Delta" (Buturlin, 1907b).

Obviously, all birds from the Kolyma Delta can be considered as syntypes, including the ZMA birds, while his other birds are paratypes. However, Sudilovskaya (1959) mentions a [lecto] 'type' from Pokhodsk (ZMM coll. nr. R-52480, male, 28 May 1905) and a 'cotype' (ZMM coll. nr. R-12744, male, 31 May 1905), also from Pokhodsk, making our birds paratypes.

[**Turdus merula ticehursti** Clancey, 1938: 750]

[Current name: *Turdus merula merula*]

[HOLOTYPE. - RSME (Clancey coll.), a 1st-year female, Darnley (E Renfrewshire [now in Strathclyde], SW Scotland, U.K.), collected 15 Oct 1937 by P.A. Clancey. Cotype I: Ticehurst coll (now probably in the HZM), 1st-year female, Darnley, collected 8 Jan 1938 by Clancey. Cotype II: HZM, 1st-year female, Cathcart (E Renfrewshire), collected 4 Dec 1937 by Clancey.]

When describing this new subspecies (Clancey, 1938), Clancey's series consisted of 12 females from Ayrshire, Renfrewshire, Lanarkshire, and Kilcreggan (Dunbartonshire), all in Scotland, with wing 123-130. Two birds collected by P.A. Clancey and received from him on 5 Mar 1948 are in ZMA, both labelled 'Lectotype, topotype'. These are: ZMA 6104, adult male, Cathcart (E Renfrewshire), collected 14 Dec 1935 (wing 132, tail 113, bill to skull 26.2, tarsus 35.2), and ZMA 6105, adult female, W Cardross (Dunbartonshire), collected 10 Dec 1938 (wing 128.5, tail 99, bill to skull 26.3, tarsus 34.7). Though these birds were apparently selected by Clancey as being similar in characters to his original type-series, they can not be paratypes, as adult males were not part of his type-series (being indistinguishable from nominate *merula*), while our adult female was collected after the publication of the new subspecies in Oct 1938 and thus was not part of the original series either.

Saxicola rubetra hesperophila Clancey, 1950: 370

Current name: *Saxicola rubetra* (monotypic)

PARATYPE. - ZMA 7956, adult male, Knapdale (Argyllshire, SW Scotland, U.K.), collected 19 Jul 1948 by P.A. Clancey; wing ca. 75 (heavily worn), tail 44, bill to skull 13.9, tarsus 21.1.

The holotype is in the RSME (Clancey coll.), an adult male breeding, Newton Mearns (E

Renfrewshire, SW Scotland), collected 19 Jun 1937 by P.A. Clancey; wing 76.5, tail 45, exposed culmen 13.5, tarsus 23. The series examined by Clancey consisted of 55 birds (seven breeding males and nine breeding females, 10 males and 11 females from autumn, and 18 juveniles), originating from "Scotland, Ireland, and the mountain districts of north and west England" (Clancey 1950). The bird in ZMA was used by Clancey when defining the characters of his new taxon, and thus is one of the paratypes.

TIMALIIDAE

Turdinus macrodactylus beauforti Voous, 1950a: 348

Current name: *Napothera macrodactyla beauforti*

HOLOTYPE. - ZMA 7759, adult male, Soengei [River] Tasik (Langkat, NE Sumatra, Indonesia), collected 26 Dec 1919 by A.F.C.A. van Heijst (coll. nr. 0129); wing 98, tail 70, bill to skull 23.4, tarsus 32.9.
PARATYPE. - ZMA 7760, adult female, Soengei Tasik, collected 26 Dec 1919 by Van Heijst (coll. nr. 0130); wing 88, tail 61, bill to skull 23.0, tarsus 33.2.
PARATYPE. - ZMA 7761, adult male, Soengei Tasik, collected 26 Dec 1919 by Van Heijst (coll. nr. 0128); wing 93, tail 60.5, bill broken, tarsus 32.2.
PARATYPE. - ZMA 7763, adult male, Basilan (= Pesilam) River (Langkat/Deli border, NE Sumatra, Indonesia), collected 21 June 1916 for L.P. Cosquino de Bussy (coll. nr. 232); wing 87, tail 59, bill to skull 23.2, tarsus 33.5.
PARATYPE. - ZMA 7764, adult male, Basilan R., collected 21 June 1916 for De Bussy (coll. nr. 212); wing 92, tail 57.5, bill to skull 24.5, tarsus 33.5.
PARATYPE. - ZMA 7765, adult female, Basilan R., collected 21 June 1916 for De Bussy (coll. nr. 233); wing 90.5, tail 54, bill to skull 24.8, tarsus 32.5.

The original series included six paratypes (four males, two females) (Voous 1950a), all then in the ZMA, of which five are still remaining here; one paratype from the Van Heijst coll. (ZMA 7762, male, Soengei Tasik, 31 Oct 1919, Van Heijst coll. nr. 1909) was exchanged with the USNM in Feb 1951. Voous compared his Sumatran series with 34 specimens of *macrodactylus* from W Malaya and peninsular Thailand and with 10 *lepidopleurus* from Java, in the BMNH and RMNH.

[**Turdinus marmoratus grandior** Voous, 1950a: 351]

[Current name: *Napothera marmorata grandior*]

[HOLOTYPE. - BMNH 1908.12.15.94, adult female, Semangko Pass (Selangor/ Pahang boundary, W Malaysia), collected 28 Nov 1908 by H.C. Robinson.]

Voous had only one other bird of this new taxon available, a female from Mount Bidai (W Malaysia), but it was not stated in what collection this paratype was (either in the BMNH, NRM, MZB, or Singapore Museum, as these were the collections from which birds were examined). Wing of these two females 101, 104, tail 84.5, 86.5, bill 16.5, tarsus 35, 35.5 (Voous 1950a).

Malacocincla celebensis togianensis Voous, 1952: 74

Current name: *Trichastoma celebense togianense*

HOLOTYPE. - ZMA 10327, adult male, Malenge (Togian Is, Gulf of Tomini, Sulawesi, Indonesia), collected 10 Dec 1939 by J.J. Menden; wing 79, tail 56.5, bill to skull 22.4, tarsus 30.0.
PARATYPE. - ZMA 10328, adult female, Malenge, also collected 10 Dec 1939 by Menden; wing 73.5, tail 52.5, bill to skull 19.2, tarsus 27.2,
PARATYPE. - ZMA 10329, adult female, Malenge, collected 8 Dec 1939 by Menden; wing 75, tail 54.5, bill to skull 19.5, tarsus 25.7.

The original series examined contained just these three birds (Voous, 1952).

SYLVIIDAE

Regulus ignicapillus laeneni Van Marle & Voous, 1949: 125

Current name: *Regulus ignicapillus balearicus*

HOLOTYPE. - ZMA 45739, adult female, Camp des Chênes near Blida (N Algeria), collected 18 Jun 1948 by J.R. Laenen (coll. nr. 1078), ex Van Marle coll. nr. 5739; wing 50.5, tail 37.5, bill to skull ca. 12.6, tarsus 17.4.
PARATYPE. - ZMA 45734, adult male, Camp des Chênes, collected 18 Apr 1948 by Laenen (coll. nr. 1076), ex Van Marle coll. nr. 5734; wing 54, tail 41, bill to skull 11.0, tarsus 18.1.
PARATYPE. - ZMA 45735, adult male, Camp des Chênes, collected 20 May 1948 by Laenen (coll. nr. 1074), ex Van Marle coll. nr. 5735; wing 55.5, tail 40.5, bill to skull 11.6, tarsus 17.3.
PARATYPE. - ZMA 45736, adult male, Camp des Chênes, collected 4 Jul 1948 by Laenen (coll. nr. 1077), ex Van Marle

coll. nr. 5736; wing 53, tail 40.5, bill to skull 11.8, tarsus 17.5.
PARATYPE. - ZMA 45737, adult female, Camp des Chênes, collected 18 April 1948 by Laenen (coll. nr. 1079), ex Van Marle coll. nr. 5737; wing 51.5, tail 39.5, bill to skull 11.3, tarsus 16.9.
PARATYPE. - ZMA 45738, female, Camp des Chênes, collected 8 Sep 1948 by Laenen (coll. nr. 1075), ex Van Marle coll. nr. 5738; wing 53, tail 38.5, bill to skull 11.7, tarsus 18.1.

According to the collector's label, the date of ZMA 45737 is 18 April, not 18 June as stated in the original description.

This race is synonymized with *R.i. balearicus* by Vaurie (1959) and G.E. Watson (in Mayr & Cottrell, 1986).

[**Acrocephalus stentoreus levantina** Roselaar, 1994c: 237]

[HOLOTYPE. - BMNH 1947.14.183, adult male, Bet Shean (Israel), collected 11 Mar 1924 by W.K. Bigger; wing 88.5, tail 83, bill to skull 27.6, tarsus 29.2.]
[PARATYPES. - (1) in BMNH: an adult male from the Jordan River near Jericho, 24 Nov 1919; two adult males from Lake Huleh (Israel) from 25 May 1922; (2) in ZFMK, all collected by H. Hovel: ZFMK 79.1001, 79.1002, and 79.1003, three adult males from Neve Yam near Lake Tiberias (Israel), collected 9 Mar 1968, 25 Apr 1968, resp. 23 Jan 1970; ZFMK 79.1004, juvenile female, Lake Huleh, collected 11 Aug 1962; (3) in NMW, also collected by H. Hovel: NMW 76157, 76158, and 83884, three adult males from Neve Yam, 31 Mar 1971, 19 Nov 1971, resp. 1 Nov 1988; NMW 83883, adult female, Neve Yam, 3 Dec 1982; NMW 76109, adult female, Lake Huleh, 5 Oct 1962.]

This race is darker than nominate *stentoreus* from Egypt, and has a clearly longer tail; otherwise, it does not differ much from nominate *stentoreus* in size, as shown by its weights: *levantina*, male 25.9 (24-29) (n=6), female 23.4 (23-24) (n=3), unsexed birds 24.0 (21.5-28.5) (n=10); nominate *stentoreus*, unsexed birds 23.5 (21-26.5) (n=5) (Keijl et al., 1992; Meininger & Atta, 1994; S. Su-aretz in litt., labels in ZFMK & NMW). For measurements, see Roselaar (1994c). As Dr M. Walters (BMNH) kindly pointed out (in litt., 3 Apr 1997), the initials of the collector of the holotype are W.K. Bigger, not as given in the original publication.

MUSCICAPIDAE
Cyornis caerulata albiventer Junge, 1933: 105

Current name: *Niltava caerulata albiventer*

SYNTYPE. - ZMA 14148, adult male, Batang Koewis (Deli, NE Sumatra, Indonesia), collected 30 Apr. 1915 for L.P. de Bussy (coll. nr. 278a); wing 76, tail 59, bill to skull 16.2, tarsus 16.8.
SYNTYPE. - ZMA 14149, adult female, Soengei Tasik (Langkat, NE Sumatra, Indonesia), collected 26 Nov 1919 by A.F.C.A. van Heijst (coll. nr. 02); wing 69+ (outer feathers in moult, growing), tail 51, bill to skull 16.3, tarsus 16.1.
SYNTYPE. - ZMA 14150, adult male, Soengei Tasik, collected 27 Dec 1919 by Van Heijst (coll. nr. 0136); wing 76, tail 5. - ZMA 14151, adult male, Soengei Tasik, collected 27 Oct 1919 by Van Heijst (coll. nr. 1890); wing 75.5, tail 57.5, bill to skull 16.1, tarsus 17.8.

The original series of Junge (1933) consisted of these 4 syntypes only; apparently, no attempt was made to check Sumatran birds in the RMNH, while other pre-1930 birds from Sumatra now present in the ZMA were not available then. This subspecies differs from nominate *caerulata* in the purer white (less cinnamon-buff) lower belly and vent, which contrasts more sharply with the tawny-cinnamon of the remainder of the underparts.

RHIPIDURIDAE
Rhipidura teysmanni coomansi Van Marle, 1940: 69

HOLOTYPE. - ZMA 47180, adult male, Soputan Mt. (ca. 1500 m, Langoan, Minahasa, NE Sulawesi, Indonesia), collected on 29 May 1939 for L. Coomans de Ruiter (coll. nr. 671), ex Van Marle coll. nr. 180; wing 71, tail 78.5, bill to skull 13.5, tarsus 19.0.
PARATYPES (all taken for Coomans de Ruiter in the Langoan area in 1939). - ZMA 16831, female, collected 29 May on the Soputan, coll. nr. 420 (Coomans coll. nr. 669), presented to the ZMA by Coomans de Ruiter; wing 68.5, tail 76, bill broken, tarsus 17.9; ZMA 47179, sex unknown [female by size], collected 27 May on the Soputan, coll. nr. 659 (ex Van Marle coll. nr. 179), wing 68, tail 75.5, bill to skull 13.5, tarsus 18.1; ZMA 47176, female, collected 16 May on the Soputan, coll. nr. 615 (ex Van Marle coll. nr. 176), wing 67, tail 71.5, bill to skull 13.4, tarsus 18.3; ZMA 47177, male, collected 23 May on the Soputan, coll. nr. 642 (ex Van Marle coll. nr. 177), wing 73.5, tail 78, bill to skull 14.2, tarsus 19.6; ZMA 47178, male, collected 26 May between Tumarata and the Soputan plateau (900 m), coll. nr. 654 (ex Van Marle coll. nr. 178), wing 74.5, tail 82, bill to skull 14.5, tarsus 19.2; ZMA 47181, male, collected 12 June on the Kelelondey plateau in the Soputan Mts. (1380 m), coll. nr. 686 (ex Van Marle coll. nr. 181), wing 71.5, tail in moult, bill to skull 14.1, tarsus 19.6.

The collecting date of the holotype is 29 May according to the original label, not 26 May as stated by Van Marle (1940). The type series was said to include 10 birds (Van Marle, 1940), of which seven are listed above; as four other paratypes (three adults and an immature) went with the Coomans de Ruiter collection to the RMNH, the series may in fact have consisted of 11 birds. This taxon is valid according to E. Mayr (in Mayr & Cottrell, 1986).

MONARCHIDAE

Myiagra castaneigularis Layard, 1876: 389

Current name: *Myiagra azureocapilla castaneigularis*

SYNTYPE. - ZMA 2302, unsexed adult [female according to plumage], Fiji, collected by E.L. Layard (undated); wing 75.5, tail 64, bill to skull 16.0, tarsus 19.2.

According to Layard (1876), the type-series was collected at Kandi (= Bua), western Vanua Levu, Fiji; both male and female were described, but the number of each examined is not stated. The ZMA-bird was probably obtained from a bird dealer shortly after its description. There are no syntypes in the BMNH (Warren & Harrison, 1971).

Terpsiphone floris Büttikofer, 1894: 293, pl. 18, figs. 1-3

Current name: *Terpsiphone paradisi floris*

SYNTYPE. - ZMA 55051 (alcohol coll.), male, Bari (Flores, Indonesia), collected 26/28 Nov 1888 by M. Weber (coll. nr. 491a).

Büttikofer (1894) lists seven syntypes, all collected on Flores in Nov-Dec 1888 by Max Weber: (1) a male from Reo (Weber's coll. nr. 7, on alcohol), (2) a male from Sikka (no coll. number, on alcohol), (3) a male from Maumeri (coll. nr. 48a, skin), (4) a female from Maumeri (coll. nr. 48, on alcohol), (5) a male from Bari (no coll. number, skin), (6-7) two males from Bari (coll. nrs. 491 & 491a, on alcohol). Of these, the last-mentioned is in the ZMA, the remainder is in the RMNH.

PARIDAE

Parus ater pinicolus Clancey, 1943: 66

Current name: *Parus ater britannicus*

PARATYPE. - ZMA 45560, male, Dornoch (SE Sutherlandshire, Scotland, U.K.), collected 31 Aug 1938 by P.A. Clancey (ex Van Marle coll. nr. 5560); wing 60.5, tail 43.5, bill to skull 10.4, tarsus 17.0.
PARATYPE. - ZMA 45561, female, Dornoch, collected 1 Sep 1938 by Clancey (ex Van Marle coll. nr. 5561); wing 60.5, tail 43.5, bill to skull 11.0, tarsus 17.2.

The holotype is in the RSME (Clancey coll.), an adult male from Rothiemurchus Forest (Inverness, N Scotland, U.K.), collected 27 Mar 1943 by P.A. Clancey.

The type-series consisted of 25 birds, of which five were from the type locality, with the remaining 20 from Caithness, Sutherlandshire, Rossshire, and elsewhere in Inverness (Clancey, 1943); the Sutherlandshire paratypes included the birds now in ZMA (received from Clancey in the 1950's). This form differs slightly but constantly from topotypical *britannicus* in the more olive-grey mantle and scapulars (less buff) and browner-buff flanks to under tail-coverts (less tawny), and is recognized by, e.g., Eck (1984), but not by Snow (1957), Vaurie (1957), or Paynter (1967).

SITTIDAE

Sitta europaea norvegica Van Marle & Voous, 1950: 70

Current name: *Sitta europaea europaea*

HOLOTYPE. - ZMA 43072, adult female, Norheimsund (Hordaland, SW Norway), collected 30 Sep 1929 by A. Bernhoft-Osa, ex Van Marle coll. nr. 3072; wing 87.5, tail 43.5, bill to skull 21.9, tarsus 19.3.
PARATYPE. - ZMA 8018, adult female, Voss (Hordaland), collected 6 Nov 1937 by A. Bernhoft-Osa, ex Stavanger Mus. coll. nr. 2203, received Dec 1949; wing 88, tail 44.5, bill to skull 23.0, tarsus 20.0.
PARATYPE. - ZMA 42092, adult female, Granvin (Hordaland), collected 2 June 1928 by an unknown collector (handwriting of original label not Bernhoft-Osa), ex Van Marle coll. nr. 2092; wing 87, tail 45, bill to skull 22.0, tarsus 20.4.
PARATYPE. - ZMA 43070, adult female, Voss, collected 20 Dec 1930 by Bernhoft-Osa, ex Van Marle coll. nr. 3070; wing 85.5, tail 43, bill to skull 21.7, tarsus 20.7.

In the original description, the collecting date of the holotype was erroneously given as 2 Jun 1928;

this date belongs to one of the paratypes, however.

The range of this subspecies is restricted to the Hardanger, Voss, and Stavanger areas of SW Norway. The original series examined from here consisted of seven males and 11 females (Van Marle & Voous, 1950), but as males were stated to be indistinguishable from nominate *europaea* from Sweden, only the females are to be considered as types. Thus, ZMA 43071, a male collected together with the holotype, is not a paratype, nor is ZMA 42091, a male which was paired with paratype ZMA 42092. The other seven female paratypes are in some of the other collections examined by Van Marle and Voous, thus in the BMNH, NRM, ZMUC, or the Stavanger Museum.

The underparts of the female of this taxon are largely pale buff, not white as in topotypical nominate *europaea* from Sweden, but Swedish females are not as uniform white as Van Marle & Voous (1950) suggest, especially in the south-west, and *caesia/europaea* intergrades from NE Denmark (Sjaelland, Lolland) are also close to Hordaland females.

Sitta europaea harrisoni Voous & Van Marle, 1953: 10

Current name: *Sitta europaea caesia*, with a slight tendency to *S. e. levantina* (see Roselaar, 1995)

PARATYPE. - ZMA 14363, adult female, Bodoma valley (above Alexandroúpolis, Thráki, NE Greece), collected 23 May 1935 by J.M. Harrison (coll. nr. 269); wing 87, tail 43.5, bill to skull 20.0, tarsus 20.6.

The holotype is in the HZM, an adult male from Rila Mts. (near Rila Monastery, 42°07'N 23°19'E, SW Bulgaria), collected 7 May 1932 by J.M. Harrison (coll. nr. 118). According to Voous & Van Marle (1953), this form is restricted to NE Greece (five examined from Thráki, three from Mt. Olympus) and S & SW Bulgaria (14 examined from Sofia, Stanimaka, Haskovo, and Rila Mts.). These paratypes can be in any of the 22 collections checked by Voous & Van Marle during their study of *Sitta europaea.*

ZOSTEROPIDAE

Oreosterops pinaiae Stresemann, 1912: 5
Fig. 4

Current name: *Lophozosterops pinaiae*

PARATYPE. - ZMA 4720, female, Gunung Sofia (4000', Seram, Molucca Is., Indonesia), collected 25 Jun 1911 by E. Stresemann (coll. nr. 666), ex Snouckaert coll.; wing 75, tail 49, bill to skull 18.2, tarsus 24.4, weight 28 g.

The holotype is an adult male in the AMNH (coll. nr. 701424), taken on Gunung Pinaia (= Binaia, 7500') on 17 Aug 1911 by E. Stresemann (Freiburger Molukken Expedition coll. nr. 877).

According to Stresemann (1912; 1914: 138), the original series contained seven birds: a pair from Gunung Sofia (4000', 13 Jun 1911), a pair from the same site and altitude taken 25 Jun 1911, a pair from Gunung Pinaia (7000', 15 Aug), and a male from this latter site at 7500' collected 17 Aug; the latter bird is the holotype. The female of the pair from 25 Jun is in the ZMA.

Though included in *Lophozosterops* by Mees (1969) in his important review of the Indo-Australian Zosteropidae, *pinaiae* looks rather different from specimens of *L. javanica* and *L. squamiceps* in the ZMA, apparently warranting a position in a separate genus; sometimes named *Apoia pinaiae*, but the type species of this genus (*A. goodfellowi* from the Philippines) was not examined, and thus it is not known whether this combination is valid.

When looking at plate 52 in Coates & Bishop (1997), one gets the impression that the genus *Lophozosterops* is a dustbin of highly variable zosteropid forms. Apart from this, our specimen of *pinaiae* is distinctly darker grey on the side of head, side of breast, and flanks than the bird on plate 52, shows restricted buff instead of extensive white feathering at the bill-base, and has a broader and more sharply contrasting white eyering.

Pseudozosterops squamiceps heinrichi Stresemann, 1931: 82

Current name: *Lophozosterops squamiceps heinrichi*

PARATYPE. - ZMA 47142, adult male, Ile-Ile (1700 m, Matinang Mts., C Sulawesi, Indonesia), collected on 8 Nov 1930 by G. Heinrich (coll. nr. 2515), ex ZMB coll. nr. 34.2163, ex Coomans de Ruiter coll. nr. 976, ex Van Marle coll. nr. 142; wing 64.5, tail 43.5, bill to skull 15.7, tarsus 19.1.

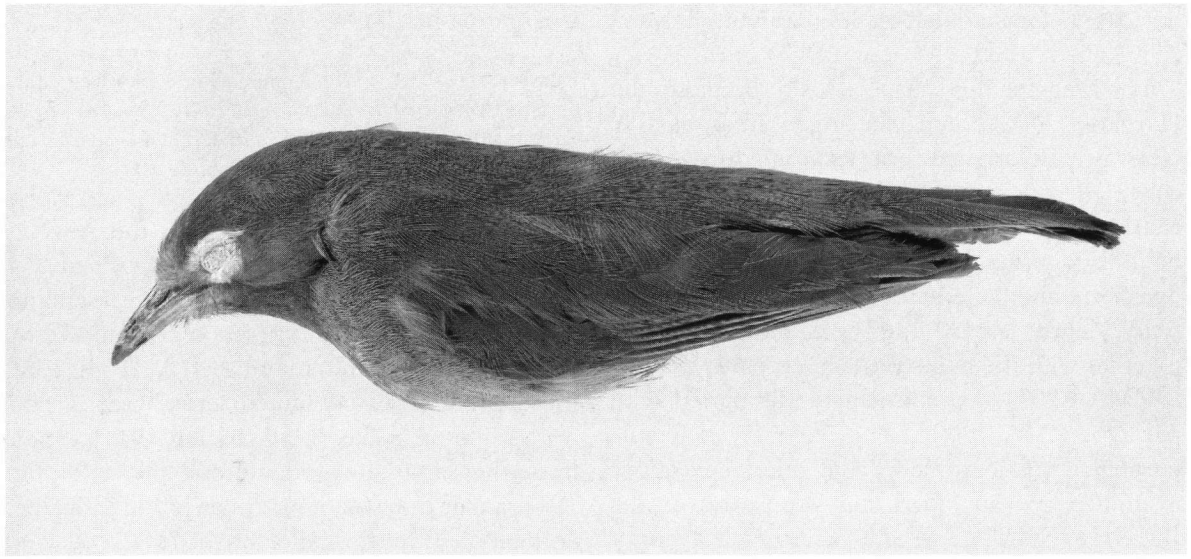

Fig. 4. Paratype of *Oreosterops pinaiae* Stresemann, 1912 [now *Lophozosterops pinaiae*]: ZMA 4720, female, 25 Jun 1911, Gunung Sofia (Seram, Indonesia), collector E. Stresemann. © L. van der Laan, ZMA.

The holotype is in the ZMB, a male from Ile-Ile (1700 m) collected 9 Nov 1930 by G. Heinrich (coll. nr. 2466). The number of birds examined when describing this new taxon is not stated (only: "wing of male/female ranges 60-64", suggesting there are several), but Mees (1969) shows that a large series was collected, and the ZMA bird, received by Coomans de Ruiter in 1939, is undoubtedly one of the paratypes. Two further paratypes are in the RMNH.

Pseudozosterops squamiceps stresemanni Van Marle, 1940: 69

Current name: *Lophozosterops squamiceps stresemanni*

HOLOTYPE. - ZMA 47141, adult male, forest of Soputan Mt. (1300 m, Langoan, Minahasa, NE Sulawesi, Indonesia), collected 18 Sep 1939 for L. Coomans de Ruiter (coll. nr. 980), ex Van Marle coll. nr. 141; wing 63.5, tail 45.5, bill to skull 15.1, tarsus 19.0.

Van Marle (1940) is not clear about the number of specimens examined of this taxon; the sentence "wing male/female 60-64" suggests there were at least two. As the Coomans de Ruiter part of the former Coomans de Ruiter/Van Marle collection from Sulawesi (now in the RMNH) contains only two birds (a female and an unsexed bird, both from Soputan Mt., 27 Aug 1939), the original series consisted of only three specimens. Mees (1969) in his review of the species apparently examined the holotype only, not the two paratypes.

MELIPHAGIDAE

[**Tropidorhynchus neglectus** Büttikofer, 1891: 213]

[Current name: *Philemon buceroides neglectus*]

Büttikofer (1891) lists 10 syntypes for his new taxon, all in RMNH, one from Sumbawa, the remaining nine from Flores. The latter include three birds collected by Max Weber in Maumeri and Reo. Though Büttikofer in his later work (1894) also included the ZMA specimens in his discussion of Weber's collection (e.g., mentioning four birds of *neglectus* from Flores), he did not do so with this preliminary article, and hence ZMA 55077 (alcohol coll.), of unknown sex, from Reo (Flores, Indonesia), collected 22 Nov 1888 by M. Weber (coll. nr. 5) is not a syntype.

PARULIDAE

Coereba flaveola bonairensis Voous, 1955: 83

HOLOTYPE. - ZMA 11089, male, Slagbaai Plantation (Bonaire, Netherlands' Antilles), collected 9 Nov 1951 by

K.H. Voous (coll. nr. 446); wing 65, tail 42, bill to skull 16.0, tarsus 18.1.
PARATYPES (all taken by Voous on Bonaire I. or Klein Bonaire I.). - ZMA 11076, juvenile male, Jan Tabak [Tabacu], 10 Nov 1951, coll. nr. 465; ZMA 11077, adult, sex unknown, Dos Poos, 8 Nov 1951, coll. nr. 441; ZMA 11078, adult male, Jan Tabak, 10 Nov 1951, coll. nr. 467; ZMA 11079, sex unknown, Onima, 12 Nov 1951, coll. nr. 482; ZMA 11080, adult male, Klein Bonaire, 27 Mar 1952, coll. nr. 1072; ZMA 11087, adult female, Klein Bonaire, 27 Mar 1952, coll. nr. 1073; ZMA 11088, juvenile female, Kralendijk, 29 Nov 1951, coll. nr. 639; ZMA 11090, adult female, Karpata, 23 Nov 1951, coll. nr. 569; ZMA 11091, adult female, Wanapa, 3 Nov 1951, coll. nr. 412; ZMA 11092, adult male, Wanapa, 3 Nov 1951, coll. nr. 413; ZMA 11094, adult male, Fontein, 15 Nov 1951, coll. nr. 519; ZMA 11099, adult male, Klein Bonaire, 27 Mar 1952, coll. nr. 1071; ZMA 11251, adult male, Dos Poos, 9 Nov 1951, coll. nr. 442; ZMA 11252, adult male, Fontein, 15 Nov 1951, coll. nr. 520.

Next to the type, Voous (1955) mentions 14 paratypes, 12 in the ZMA and two in the RMNH; however, 14 birds in the ZMA rather than 12 are labelled 'paratype', and these are all listed above. They were all available to Voous when describing the new taxon. Probably, the two juvenile birds from the list above (ZMA 11076 and 11088) were excluded from the original type-series, as they do not show the main identification character for *bonairensis*, a large white patch between the black of the throat and the yellow breast. Measu-rements of sexed adults (seven males, four females): wing, male 63.6 (58-66), female 58.9 (57.5-60); tail, male 44.1 (40-46), female 41.9 (40.5-43); bill to forehead, male 16.5 (15-18), female 15.4 (15-16) (Voous, 1955).

FRINGILLIDAE

Fringilla coelebs scotica Harrison, 1937: 65

Current name: *Fringilla coelebs gengleri*

PARATYPE. - ZMA 45427, adult male, Giffnock (E Renfrewshire [now in Strathclyde], SW Scotland, U.K.), collected 1 May 1936 by P.A. Clancey.

When describing this subspecies, Harrison had as a type-series 18 males from Renfrewshire, Lanarkshire, Dunbartonshire, and Stirlingshire before him, mostly collected by P.A. Clancey; wing of these 83-91, tail 61.5-72, bill 15-17, tarsus 18-20 (Harrison, 1937).

The holotype is an adult male, collected on 21 Oct 1936 in Carmunnock (Lanarkshire), wing 88, tail 72, culmen 15, tarsus 17, in the HZM; specifically mentioned were also cotype I, same sex and locality, taken 23 Apr 1936, with wing 87, tail 67.5, culmen 16, tarsus 18, in the HZM, and cotype II, idem, wing 87, tail 66, culmen 15.5, tarsus 19.5, in the Clancey coll. and thus now in the RSME. Also, the paratype now in the ZMA was among the type-series (received by the ZMA in the 1950's).

A female from the Clancey coll. and available to Harrison when describing this new subspecies is ZMA 45428 (from Cathcart, E Renfrewshire, 18 Jul 1936), but this is not a paratype as no mention is made of females in the original description. Many other Scottish Chaffinches from the Clancey collection are in the ZMA, but all these are collected after the description of the race and hence can not be considered as paratypes.

Fringilla coelebs hibernica Van Marle, 1949: 118

Current name: *Fringilla coelebs gengleri*

HOLOTYPE. - ZMA 45622, adult male, Glengariff (SW Ireland), collected 5 Jun 1948 by J.G. van Marle, ex Van Marle coll. nr. 5622; wing 86, tail 65.5, bill to skull 14.4, tarsus 18.4.
PARATYPES (all taken by Van Marle in June 1948 in SW Ireland). - ZMA 45620, adult male, Glengariff, 4 Jun, Van Marle coll. nr. 5620; wing 87.5, tail 65.5, bill to skull 14.1, tarsus 19.1; ZMA 45621, adult male, Glengariff, 4 Jun, Van Marle coll. nr. 5621; wing 83, tail 60, bill to skull 14.7, tarsus 18.0; ZMA 45623, adult male, Killarney, 8 Jun, Van Marle coll. nr. 5623; wing 84.5, tail 61, bill to skull 14.3, tarsus 18.8; ZMA 45624, adult male, Adare near Limerick, 10 Jun, Van Marle coll. nr. 5624; wing 89, tail 65.5, bill to skull 14.4, tarsus 18.7.

The series above is the same one as the original series used by Van Marle (1949) in the description of the taxon. The birds were stated to have clearly darker and richer orange-brown ear-coverts, cheeks, throat, and breast as breeders from the same season from Scotland (which were more cinnnamon-red), and were said to differ also from birds from N Ireland and England, but examination of a much larger series of breeders from Britain and Ireland as available now in the

BMNH, RMNH, and ZMA shows that the characters of birds from SW Ireland fall within the variation of *gengleri* from England.

Chloris chloris harrisoni Clancey, 1940: 92

Current name: *Carduelis chloris harrisoni*

PARATYPE. - ZMA 6108, adult male, Cathcart (E Renfrewshire [now in Strathclyde], Scotland, U.K), collected 4 Dec 1937 by P.A. Clancey; wing 89, tail 56.5, bill to skull 16.2, bill depth at base 9.6, bill width at base 8.9, tarsus 19.2.
PARATYPE. - ZMA 6109, adult male, Darnley (E Renfrewshire), collected 22 Jan 1938 by Clancey; wing 90, tail 55, bill to skull 15.2, bill depth at base 9.4, bill width at base 8.8, tarsus 18.8.
PARATYPE. - ZMA 6110, adult male, Darnley, collected 19 Apr 1939 by Clancey; wing 90, tail 56, bill to skull 16.3, bill depth at base 9.3, bill width at base 8.6, tarsus 18.5.

The holotype, an adult male from Thorntonhall (Lanarkshire, Scotland), collected 3 Nov 1937 by P.A. Clancey, is in the RSME (Clancey coll.); it was in moult, with wing 90 and exposed culmen 12.5 (Clancey, 1940).

Clancey's original series consisted of 18 birds from Renfrewshire, Lanarkshire, Ayrshire, Dunbartonshire, Stirlingshire, and Pertshire; the ZMA birds listed above were at his hands when describing the race and thus are paratypes (they were received by the ZMA on 5 Mar 1948). Females are apparently no paratypes, as "females at all seasons of the year portray such an enormous range of individual variation that no reliable subspecific characters can be placed on them" (Clancey, 1940). Thus, ZMA 6128, a female from Summerston (Stirlingshire, Scotland), collected 3 Dec 1938 by Clancey, is not a paratype.

The ZMA received 18 other Scottish Greenfinches from Clancey in Mar 1948; 11 of these were collected after the description of the new taxon, five (ZMA 6122-6126) were collected before the description date at Dornoch (Sutherlandshire, N Scotland), but as Sutherlandshire is not listed by Clancey as being inhabited by *harrisoni*, they can not be paratypes either.

Chloris chloris vanmarli Voous, 1951a: 87

Current name: *Carduelis chloris vanmarli*

HOLOTYPE.- ZMA 44940, adult male, near Setubal (Portugal), collected 12 May 1938 by G.A.L. Bisseling (coll. nr. 202), ex Van Marle coll. nr. 4940; wing 82.5, tail 49, bill to skull 16.1, bill depth at base 10.1, bill width at base 8.9, tarsus 17.6.
PARATYPES (all taken by G.A.L. Bisseling and his party in SW Portugal in Apr-May 1938). - ZMA 44936, adult male, shore of R. Tejo near Lissabon, 25 Apr 1938 (ex Van Marle coll. nr. 4936); ZMA 44937, adult male, Choupal near Coimbra, 29 Apr 1938 (ex Van Marle coll. nr. 4937); ZMA 44938, adult male, Choupal near Coimbra, 29 Apr 1938 (ex Van Marle coll. nr. 4938); ZMA 44939, adult male, near Setubal, 10 May 1938 (ex Van Marle coll. nr. 4939); ZMA 44941, adult male, near Setubal, 12 May 1938 (ex Van Marle coll. nr. 4941); ZMA 44942, adult male, near Setubal, 12 May 1938 (ex Van Marle coll. nr. 4942); ZMA 44943, adult male, near Setubal, 12 May 1938 (ex Van Marle coll. nr. 4936); ZMA 44944, adult female, Choupal near Coimbra, 29 Apr 1938 (ex Van Marle coll. nr. 4944); ZMA 44945, adult female, Choupal near Coimbra, 29 Apr 1938 (ex Van Marle coll. nr. 4945); ZMA 44946, adult female, near Setubal, 10 May 1938 (ex Van Marle coll. nr. 4946); ZMA 44947, adult female, near Setubal, 12 May 1938 (ex Van Marle coll. nr. 4947); ZMA 45169, juvenile male, Choupal near Coimbra, 30 Apr 1938 (ex Van Marle coll. nr. 5169).

Of the 17 male paratypes (Voous 1951a), eight are in the ZMA (listed above), five in the RMNH (also collected by Bisseling in Apr-May 1938 in the Coimbra/Setubal area); measurements of these birds (including bill depth and bill width at base) taken by A.J. van Loon and C.S. Roselaar are summarized in Cramp & Perrins (1994: 566-567). The other four male paratypes are in some of the remaining collections examined by Voous for his Greenfinch study, thus in the BMNH, HZM, NMBA, the Clancey coll. (now RSME), ZFMK, or ZSM. The number of female paratypes examined is not stated.

This form, which breeds in NW Morocco, Portugal, and NW Spain is as small as *aurantiiventris* from the northern shores of W and C Mediterranean basin, but differs in being distinctly more saturated green all-over the body, less pale yellowish-green.

Carduelis chloris voousi Roselaar, 1993: 259

HOLOTYPE. - ZMA 46315, adult male, 'Geryville' = El Bayadh (33°40'N 1°00'E, Sahara Atlas, W Algeria), collected 25 Apr 1951 by J. Laenen (coll. nr. H36), ex Van Marle coll. nr. 6315; wing 90, tail 57, bill to skull 18.9, bill depth at base 12.2, bill width at base 10.2, tarsus 19.4.
PARATYPES (all taken by Laenen in the Sahara Atlas of

Algeria (not listed in Roselaar 1993). - ZMA 8239, adult male, collected 20 Dec 1949 in Djelfa (Laenen coll. nr. 1378); wing 91, tail 56, bill to skull 18.2, bill depth at base 11.7, bill width at base 10.4, tarsus 19.1; ZMA 8243, adult female, collected 20 Dec 1949 in Djelfa (Laenen coll. nr. 1374); wing 87.5, tail 54, bill to skull 18.2, bill depth at base 11.8, bill width at base 10.4, tarsus 18.0; ZMA 8751, adult male, collected 19 Jul 1950 in Messaad (Laenen coll. nr. 1701); wing 88.5, tail heavily worn, moulting, bill to skull 19.5, bill depth at base 12.5, bill width at base 10.8, tarsus broken; ZMA 45667, adult male, collected 25 May 1949 in Djelfa (Laenen coll. nr. 1176), ex Van Marle coll. nr. 5667; wing 86, tail 58.5, bill to skull 18.2, bill depth at base 11.8, bill width at base 9.8, tarsus 18.0; ZMA 45668, 2nd summer female, collected 26 May 1949 in Djelfa (Laenen coll. nr. 1177), ex Van Marle coll. nr. 5668; wing 84, tail 54.5, bill damaged, bill depth at base 11.7, bill width at base 10.9, tarsus 17.7; ZMA 45669, 2nd summer female, collected 28 May 1949 in Djelfa (Laenen coll. nr. 1178), ex Van Marle coll. nr. 5669; wing 85.5, tail 52, bill to skull 16.7, bill depth at base 11.4, bill width at base 10.4, tarsus 18.5; ZMA 45904, adult male, collected 18 Mar 1950 at Rocher de Sel near Djelfa (Laenen coll. nr. 1513), ex Van Marle coll. nr. 5904; wing 88, tail 57, bill to skull 17.3, bill depth at base 13.0, bill width at base 10.8, tarsus 17.9; ZMA 46316, adult male, collected 27 Apr 1951 in El Bayadh (Laenen coll. nr. H34), ex Van Marle coll. nr. 6316; wing 91, tail 57, bill to skull 18.6, bill depth at base 12.0, bill width at base 10.5, tarsus 18.3; ZMA 46317, adult female, collected 27 Apr 1951 in El Bayadh (Laenen coll. nr. H35), ex Van Marle coll. nr. 6317; wing 88, tail 55.5, bill to skull 18.6, bill depth at base 12.6, bill width at base 10.2, tarsus 18.1.

Further paratypes, also taken in the Sahara Atlas by Laenen, are in the ZFMK: a male and female collected Aïn el Bel (25 km S of Djelfa) 4 Nov 1953 (wing 90 resp. 86.5), and a male from Messaad 17 Nov 1953 (wing 91.5).

This race occurs also in the Moroccan Atlas (present in the BMNH, but birds here are not paratypes, as they were examined after the description of *voousi*). Birds seen from the Médéa/Alger area (Gorges de la Chiffa, Blida, Médéa, Reghaia E of Alger; in RMNH, ZFMK, and ZMA) as well as those from the Biskra area (Aurès Mts., Lambése, El Outaya; in ZFMK) were excluded from the paratype-series: though some birds are inseparable in colour and size from *voousi*, others are somewhat smaller and darker, showing some introgression of the yellowish *aurantiiventris* from N Tunisia or the greenish *vanmarli* from N Morocco.

This race is much larger than the other Mediterranean forms, agreeing with *harrisoni* or nominate *chloris* from W & N Europe in size, but differs from these latter in its markedly diluted grey pigments, resulting in paler colours than in other races. See also Roselaar (1993).

Pyrrhula pyrrhula wardlawi Clancey, 1947: 76

Current name: *Pyrrhula pyrrhula pileata*

PARATYPE. - ZMA 7994, adult female, Kinloch Rannoch (Pertshire, Scotland, U.K.), collected 3 Apr 1947 by W.J. Plowden Wardlaw, received from the latter on 11 Oct 1949 but still available to Clancey when he wrote his article in May 1947.

The holotype, an adult female collected at Kinloch Rannoch on 2 Jun 1946 by W.J. Plowden Wardlaw, is in the RSME (Clancey coll.); wing 82.5, tail 61, exposed culmen 9.0, bill depth at nostril 8.0, tarsus 17.5 (Clancey 1947). Paratypes were 14 males, 10 females, and two juveniles, collected in Pertshire (11 birds), Inverness (5), Rossshire (7), and Sutherlandshire (3), from the collections of Plowden Wardlaw, R. Meinertzhagen, RSME, and P.A. Clancey. The ZMA has several other Bullfinches from Plowden Wardlaw, but these were collected after the description of *wardlawi*. This taxon is similar to *pileata* from England, Wales, and Ireland, but its bill is ca. 1 mm shorter, ca. 0.5 mm narrower at base, and ca. 0.5 mm less deep at base (C.S. Roselaar); also, "males are bluer on the mantle and duller carmine-pink on the underparts, lacking the orange or flame tinge of birds from England; females are greyer above and below than females from England" (P.A. Clancey in litt. 11 Nov 1985), though this is not very obvious in specimens examined.

Pyrrhula pyrrhula iberiae Voous, 1951b: 132

HOLOTYPE. - ZMA 10341, adult male, Linares de Riofrio (Salamanca, Spain), collected 3 Mar 1951 by H. Grün; wing 81, tail 60, bill to skull 10.7, tarsus 16.7.
PARATYPE. - ZMA 9479, adult female, collected at the type-locality on 24 December 1950, wing 82.5, tail 57.5, bill to skull 10.4, tarsus 16.9.

Voous (1951b) mentions three female paratypes, but only one is now in ZMA; ZMA 9480 (female, Linares de Riofrio, 18 Jan 1951) was sent in

exchange to the AMNH in Feb 1956, a further female dated 4 Mar 1951 cannot be traced. Another four males and three females from the type-locality are in the ZMA, but these were taken by Hermann Grün between Nov 1951 and Dec 1955, after the description of this taxon. This is a small-sized subspecies, like *europoea* from western France, but the male differs from the latter by having the cheeks and underparts more fiery vermilion-red, less pink-red, and the female is much paler and greyer above and below, scarcely showing a brown tinge on the underparts.

[**Pyrrhula pyrrhula paphlagoniae** Roselaar, 1995: 24]

[HOLOTYPE. - ZFMK 39177, male, W of Karadere (near Bolu, western Black Sea Coastlands, Turkey), collected 25 Sep 1934 by H. Rössner; wing 87, bill to skull 11.4, bill base (depth x width) 9.1 x 9.0.]
[PARATYPES (all from NW Asia Minor in the NMW, collected by Rössner or (the last two) by G. Rokitansky and H. Schifter). - A juvenile female from Bolu Dagh 26 Aug 1934 (wing 88, bill 13.5, bill width at base 9.8), two males west of Karadere 27/28 Sep 1934 (wing 91, bill 13.1, bill base 9.6 x 9.9, and wing 86.5, bill 13.5, bill base 9.6 x 10.0), a female from Bolu 28 Sep 1934 (wing 85, bill 14.0, bill base 9.1 x 9.3), a male from Bolu 23 Oct 1934 (wing 91.5, bill 13.0, bill base 10.2 x 10.0), an adult male from Abant Gölü 5/7 Jul 1968 (wing 87.5, bill 12.8, bill base 10.2 x 10.4), and a juvenile female from Abant Gölü from this date (wing 87.5, bill 11.2, bill base 9.6 x 9.8).]

This taxon is restricted to NW Asia Minor. In size, it equals *germanica* from W-C Europe, but the bill-shape is as in *rossikowi* from NE Turkey and the Caucasus area, with the bill more swollen at the base and with the cutting edges convex when seen from above, not straight; the upperparts are slightly paler grey than in *germanica*, the underparts deeper red. It is smaller than *rossikowi*.

Carduelis flammea disruptis Clancey, 1953: 72

Current name: *Carduelis flammea cabaret*

PARATYPE. - ZMA 8788, adult male, Largo (Ayrshire, Scotland), collected 28 Aug 1935 by P.A. Clancey, received 12 Oct 1950.
PARATYPE. - ZMA 8789, adult female, collected with the previous bird.

The holotype is in the RSME (Clancey coll), an adult male from Knapdale (Argyllshire, W Scotland), collected Oct 1948 by P.A. Clancey. When describing *disruptis*, Clancey (1953) gave as distribution: "West Britain, with the most typical birds in the Western Scottish Highlands and Ireland", without precise details about specimens examined. Though the race was described in 1953, the review was based on birds examined in 1950, then still including the birds later forwarded to the ZMA. The birds from W Britain used in 1950 are all to be considered as paratypes.

The locality 'Largo' of the ZMA birds was explicitly stated by Clancey to be in Ayrshire, thus in SW Scotland, not the more well-known Largo in Fife (SE Scotland). The ground-colour of upperparts and flanks of *disruptis* were said to be slightly richer tawny-brown than in *cabaret* from France, and the crown and mantle were marked with purer black shaft-streaks; also, the vent was marked with darker shaft-streaks than in *cabaret*, the wing and tail were darker, and the hindneck paler (Clancey, 1953; P.A. Clancey in litt., 11 Nov 1985).

Leucosticte sillemi Roselaar, 1992: 226

HOLOTYPE. - ZMA 43449, adult male, Camp 58 of the Netherlands' Karakorum Expedition 1929-1930, at Kushku Maidan (35°26'N 78°13'E, 5125 m, W Tibetan plateau, in an area disputed by India and China), collected 7 Sep 1929 by J.A. Sillem (coll. nr. 53), ex Van Marle coll. nr. 3449; wing 128, tail 67.5, bill to skull 14.3, tarsus 19.7.
PARATYPE. - ZMA 43450, a fledged juvenile male, collected 8 Sep 1929 at the same locality (coll. nr. 54, ex Van Marle 3450). Wing 108+ (growing), tail 53+ (growing), bill to skull 12.5+ (growing), tarsus 20.1 (probably full-grown).

See Roselaar (1992) for details of this species and its discovery. For a plate of the adult bird in colour, see Roselaar (1994b).

ESTRILDIDAE
Nigrita emiliae Sharpe, 1869: 384

Current name: *Nigrita canicapilla emiliae*

PARATYPE. - ZMA 553, sex unknown, Fantee (Ghana), collected at an unknown date by E.T. Higgins, ex R.B. Sharpe

(coll. nr. 95); wing 65, tail 46, bill to skull 12.7, tarsus 16.3.

The holotype is in the BMNH, an adult from Fantee, ex Sharpe coll.; wing 2.5' [= 63.5 mm], tail 1.7' [= 43 mm] (Sharpe, 1869).

ZMA 553 is almost certainly one of an original series of eight birds recorded in Sharpe's Catalogue of African Birds (1871: 61), of which only seven are listed in Sharpe (1890: 316-317); thus, the 8th bird must have reached the ZMA between 1871 and 1890.

The article with the description of *emiliae* discussed specimens from two collections, one of Mr Whitely from the Fantee country general, the other of Mr Higgins from Cape Coast Castle and immediate surroundings, within the Fantee country. As the ZMA type was collected by Higgins, its precise locality is thus Cape Coast (Central Province, Ghana).

A specimen of another species from the Sharpe collection, *Malimbus rubricollis bartletti*, ZMA 37, Fantee, was received by the ZMA before Sharpe described *bartletti* and thus did not form part of the type-series; it is not listed by Sharpe in his original diagnosis (Sharpe, 1890).

PARADISAEIDAE

Diphyllodes (Paradisea) gulielmi III
Meyer, 1875: 29
Fig. 5

Currently considered as a hybrid between *Diphyllodes magnificus* and *Cicinnurus regius*

HOLOTYPE. - ZMA 782, adult male, obtained in April-May 1874 from a local hunter on Sauék [= Saonek, a small island S off W Waigeu I.] by S.C.J.W. van Musschenbroek when the latter was on travel with O. Beccari, said to be collected in the interior mountains of E Waigeu. Presented by Van Musschenbroek in 1877 to H. M. King Willem III, who had them on exposition in the palace Het Loo at Apeldoorn. The King send the bird for exhibition to the International Trade Fair, organized by Van Musschenbroek in Amsterdam in the summer of 1883, and donated it to the Museum of the Royal Zoological Society 'Natura Artis Magistra' (the predecessor of the ZMA) on 26 Aug 1883, after the end of the fair. Wing 106.5, tail (excluding the streamers) 39, bill to skull 27.6, tarsus not measured (see below).
COTYPE. - ZMA 783, adult female, with data as for ZMA 782 above; wing 120, tail 58.5, bill to skull 24.7, tarsus not measured.

The holotype is strikingly intermediate between males of the King Bird of Paradise *Cicinnurus regius* and the Magnificent Bird of Paradise *Diphyllodes magnificus*, without characters of his own, a reason to consider it as a hybrid (Berlioz, 1927; Stresemann, 1930). The cotype is a normal female *D. m. magnificus*, not a hybrid. Both birds were leg-less trade skins, acquired by Van Musschenbroek on Saonek, a well-known trading post for bird skins, in the period that Van Musschenbroek was the Resident [Governor] of Ternate, another trading post. The Ternate Residency then included the N Moluccan and W Papuan islands, as well as (indirectly) W mainland New Guinea (which was a colony of the Sultan of Tidore, a subordinate of the Dutch Government). Hence, the provenance of the specimens is guesswork, but as neither *D. magnificus* nor *C. regius* occur on Waigeu, they probably came from Salawati I. or the W mainland of New Guinea. The leg-less birds had to be mounted before they were given to Willem III, and therefore were provided with the legs of a common European bird, perhaps a Blackbird *Turdus merula* (tarsus 33, middle toe 26). The mounting was done by H. Koller, taxidermist of the Royal Zoological Society. The description of this taxon, which was recognized and named by Van Musschenbroek in letters sent 6-13 Nov 1874 to A.B. Meyer and K. von Rosenberg, was first made public by Meyer, either in a letter dated 9 Jan 1875 and published shortly afterwards in the journal 'Zoologische Garten', vol. 16, pp. 29-30 ('the January number for 1875'), in a letter from Meyer published in Nature on 14 Jan. 1875 (p. 208), or in a letter from Meyer read for the Zoological Society of London on 19 Jan 1875 and published in the Society's journal for that year on p. 31; in these letters, Meyer cites Van Musschenbroek as the author of the name. Von Rosenberg's letter was sent to *Zoologische Garten* on 10 Jan 1875 and published on pp. 30-31. Both gentlemen extensively quote details of Van Musschenbroek's original letters, while Meyer also adds details of the two type-specimens received from Van Musschenbroek (especially in Meyer, 1875). This account is based on Meyer (1875), Von Rosenberg (1875), and a manuscript of K.H. Voous dated Mar 1943 present in the ZMA.

The ZMA has also another leg-less male of this hybrid, coll. nr. 3503, a trade skin received in

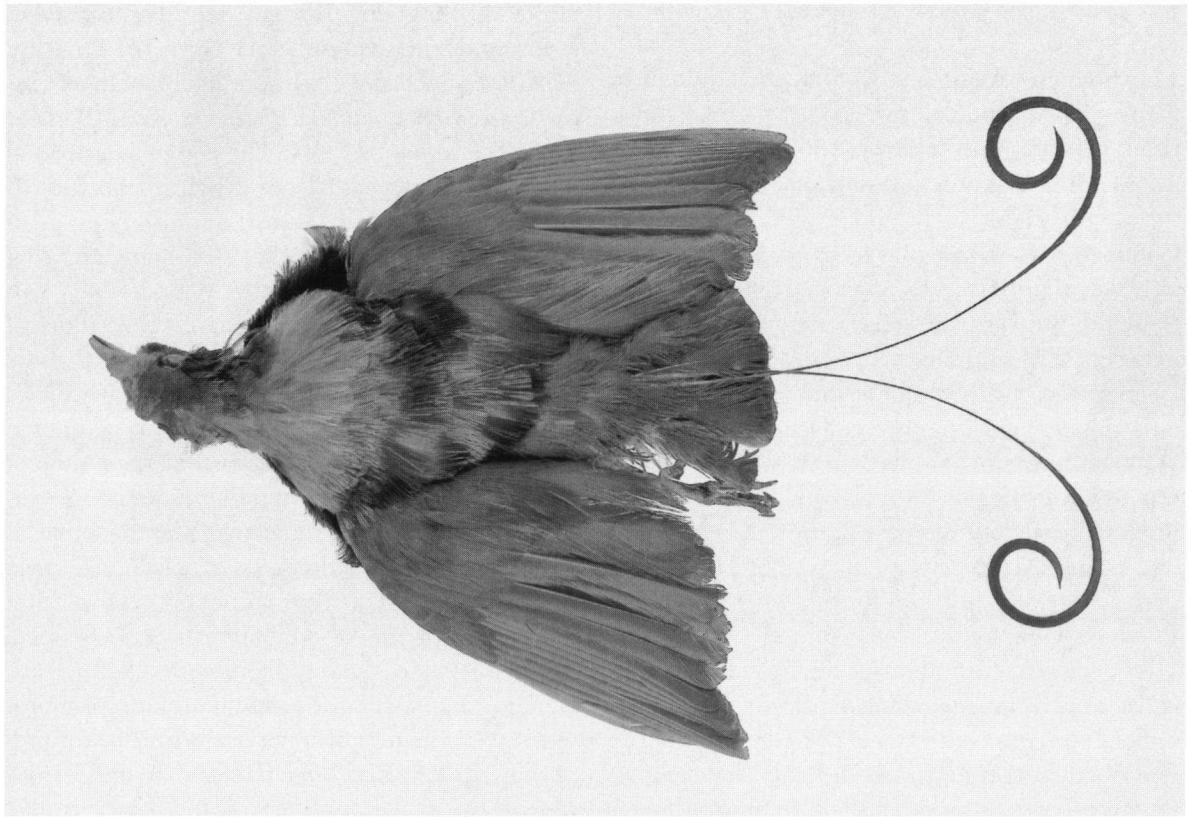

Fig. 5. Holotype of *Diphyllodes gulielmi III* Meyer, 1875 [now known to be a hybrid between *Diphyllodes magnificus* and *Cicinnurus regius*]: ZMA 782, male, Apr-May 1874, 'interior Waigeu I.' [=Salawati I. or W mainland New Guinea], ex collection S.C.J.W. van Musschenbroek, ex collection H. M. King Willem III. © L. van der Laan, ZMA.

1945 from the Handelsmuseum (Trade Museum) of the Colonial Institute in Amsterdam (coll. nr. 2407-3-1933); wing 110.

CORVIDAE

Garrulus glandarius lusitanicus Voous, 1953: 39

HOLOTYPE. - ZMA 9477, adult male, Linares de Riofrio (Salamanca, Spain), collected 25 Apr 1947 by H. Grün; wing 187, tail 158, bill to skull 33.2, tarsus 42.8.

PARATYPES (all from Linares de Riofrio and collected by H. Grün). - ZMA 9478, male, 26 Nov 1943; wing 187, tail 150, bill to skull 32.5, tarsus 42.8; ZMA 10337, female, 4 Apr 1951; wing 173, tail 139, bill to skull 32.1, tarsus 41.6; ZMA 10338, female, 3 Mar 1951; wing 178.5, tail 142, bill to skull 30.6, tarsus 43.0; ZMA 46062, female, 25 Apr 1944 (ex Van Marle coll. nr. 6062); wing 172, tail 137, bill to skull 33.2, tarsus 42.8; ZMA 46063, female, 14 May 1941 (ex Van Marle coll. nr. 6063); wing 169, tail 133, bill to skull 29.8, tarsus 41.4; ZMA 46123, male, 14 Apr 1950 (ex Van Marle coll. nr. 6123); wing 180.5, tail 146, bill to skull 33.2, tarsus 41.8; ZMA 46124, male, 11 Apr 1951 (ex Van Marle coll. nr. 6124); wing 184, tail 147, bill to skull 33.5, tarsus 42.0; ZMA 46139, male, 17 May 1951 (ex Van Marle coll. nr. 6139); wing 177, tail 138, bill to skull 33.4, tarsus 43.0.

According to Voous (1953), the original series consisted of five males and five females from NW Spain and Portugal; the single remaining paratype not listed above (a female) could be in any of the 22 bird collections examined for his study, e.g., a bird from Sintra (Portugal) of Aug 1863 or one from Linares de Riofrio of 6 Mar 1951 in the RMNH, or one of the four females from Linares de Riofrio in ZFMK (though it is then not quite clear why males from Linares de Riofrio in these collections were excluded from the type series). The ZMA has a number of additional birds from the type locality, but these were collected after the taxon was described.

Lusitanicus is considered as a synonym of *fasciatus* from SE Spain by C. Vaurie (1959, and in

Mayr & Greenway, 1962); however, the upperparts of *lusitanicus* are much paler and more vinous than in *fasciatus* (which is much darker grey above), and the underparts are rather whitish, not as strongly suffused dark grey (Voous, 1953). This could be confirmed in series examined in the BMNH and ZFMK: *lusitanicus* is a pale subspecies, rather near the Italian *albipectus*, though on average slightly more pink-brown.

Garrulus glandarius yugoslavicus Voous, 1953: 39

Currently considered as an intergrade between nominate *glandarius* from N & C Europe and *albipectus* of Italy and the Croatian coast (S to the Ionian Islands), though nearer to nominate *glandarius*.

PARATYPE. - ZMA 9204, adult male, Kapaonik Mts. (C Serbia), collected 13 Jul 1949, ex Muzej Srpske Zemle Beograd (coll. nr. 8980), received 16 Oct 1950; wing 184, tail 149, bill to skull 34.3, tarsus 42.2.
PARATYPE. - ZMA 9338, male, Odzak (NE Bosnia- Herzegovina), collected 21 Mar 1948 by D. Rucner, ex. Ornith. Inst. Zagreb, received 31 Jan 1951; wing 189, tail 146, bill to skull 37.0, tarsus 44.6.
PARATYPE. - ZMA 9340, female, Biljevina near Crni Lug (Gorski Kotar Mts., NW Croatia), collected 12 Nov 1950 by D. Rucner, ex. Ornith. Inst. Zagreb, locally ringed as a pullus on 21 May 1950; wing 187, tail 152, bill to skull 31.8, tarsus 44.2.
PARATYPE. - ZMA 9341, male, Jastrebarsko (30 km from Zagreb, NW Croatia), collected 29 Nov 1950 by D. Rucner, ex. Ornith. Inst. Zagreb; wing 184, tail 140, bill to skull 33.3, tarsus 44.7.
PARATYPE. - ZMA 10484, female, Medvenica Mt. (near Zagreb, NW Croatia), collected on 13 May 1951 by D. Rucner, ex. Ornith. Inst. Zagreb; received 17 Aug 1950); wing 181, tail 149, bill to skull 32.7, tarsus 43.3.
PARATYPE. - ZMA 10485, male, taken with ZMA 10484 as a breeding pair; wing 194, tail 154, bill broken, tarsus 43.0.

The holotype is SMF 16632, an adult female from Konjic (Herzegovina, former Yugoslavia), collected 9 Apr 1893, originally from the O. Kleinschmidt collection.

According to Voous (1953), the type-series consisted of six males and four females. The three paratypes not listed above are to be found in some of the 22 bird collections examined by Voous for his study on the European Jays (Voous, 1953). Of the Yugoslavian birds in the ZMA, Voous (1953) explicitly excluded ZMA 9342 from his type-series (Krk Island, an *albipectus*) as well as six autumn birds from Zagreb which were considered to be migrant nominate *glandarius*.

Corvus rhipidurus stanleyi Roselaar, 1993: 259

PARATYPE. - ZMA 42822, adult female, Nabi Musa (between Jericho and the NW Dead Sea), collected 22 Jan 1911 by E. Schmitz, ex Snouckaert/Van Marle coll. nr. 2822; wing 346, tail 141.5, bill to skull 52.4, bill depth at nostril 19.4, tarsus 55.4.

The holotype is BMNH 1946.63.10, an adult male from the NW shore of the Dead Sea (Israel), collected 12 Nov 1944; wing 369, tail 148, bill to skull 55.6, bill depth at nostril 19.8, tarsus 61.3.

Further paratypes (not listed in Roselaar, 1993) are: (1) in ZFMK (incl. the Kleinschmidt coll.): three males from Ain Feschcha (= Ain Fashkha, NW shore of Dead Sea) collected 1/7 Dec 1897, a female from Gebel Hamra (above Dahab, SE Sinai, Egypt) taken 25 Mar 1898, and two females from 'Sinai' (Egypt) from 22 Jul 1911; (2) in BMNH: a male and female from Jericho 8 Mar 1923, a male and female from the NW shore of the Dead Sea 19 Oct 1919 resp. 5 Nov 1944, an undated male from the El Ghor area near Safi (SE end of Dead Sea, Jordan), a female from Petra (Jordan) 12 Mar 1923, a male from Al Bad' (NW Saudi Arabia) 24 Mar 1947, a male and female from Madriga (= Madrakah, near Jiddah, Saudi Arabia) 13-14 Jan 1948, two unsexed birds from Shariya (= Ushayrah, E of Mecca, Saudi Arabia) 20 Feb 1934, a male from At Ta'if (Saudi Arabia) 2 Jun 1934, a female from Kurr on the At Ta'if Plateau 30 Jan 1936, a female from the Wadi Bishah area (SW Saudi Arabia) 30 May 1936, three males from Lahij (near Aden, SW Yemen) 8 Mar 1895, 13 Feb 1913, and 2 Feb 1922, a male from Sheikh Othman (= Ash Shaykh Uthman, near Aden, SW Yemen) 13 Feb 1922, one unsexed bird from Ma'ir in the Abyan area (SW Yemen) 14 Oct 1899, and a male from Redet Juhin (= Raydat al Juhiyin, Hadhramaut, Yemen) Mar 1933.

The paratype of the ZMA made some history, being the first bird of the species *ca. rhipidurus* to be measured by C.S. Roselaar for Cramp & Perrins (1994); the next, RMNH cat. nr. 2, an

adult male from Abyssinia, was so much larger (wing 424, tail 171, bill to skull 60.4, bill depth at nostril 24.0, tarsus 71.0) that it seemed improbable that the same taxon was involved; after ascertaining that no measuring mistakes were made, measuring of a much larger series indeed proved the existence of two subspecies, differing in size: the smaller *stanleyi* in the Sinai, Dead Sea depression, Arava Valley, and the Arabian Peninsula, the larger nominate *rhipidurus* in the NE Afrotropics north to the hills of SE Egypt.

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