

## Birds collected during the Lepecki Expedition to northern Madagascar in 1937–1938

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*Received 18 April 2011; accepted 5 May 2011*  
*Published 23 August 2011*

**Abstract.** A total of 54 species of birds belonging to 16 non-passerine and an unresolved number of passerine families were collected in the northern part of Madagascar by the Lepecki Expedition in 1937–1938. This data is used to clarify the distribution of Malagasy birds in the 1930s.

**Key words.** Aves, Madagascar, Mieczysław Lepecki, Arkady Fiedler.

### INTRODUCTION

A Polish expedition headed by Mieczysław Bohdan Lepecki (1897–1969), Polish soldier and traveller visited and explored Madagascar in 1937–1938 with the view to it becoming a potential Polish colony (Lepecki 1938, Fiedler 1939, Kowalski 2006). During this expedition birds and other natural history specimens were collected by Arkady Fiedler (1894–1985), B. Kreczmer and J. Skibiński.

Due to historical reasons (Brzęk 1959, Kazubski 1996, Mlíkovský 2007) the details of this interesting collection were not previously published. Below I present the results of my study of the surviving specimens.

### MATERIAL AND METHODS

The specimens are deposited in the Museum and Institute of Zoology (MIZ), Polish Academy of Sciences, Warszawa, Poland, where I studied them in 2010. I have found almost all labelled with the exact dates and localities, but about one third were unidentified. I checked the taxonomic identity of all previously identified specimens and identified the others mainly using Sinclair & Langrand (2003).

Wing length (hereafter “wing”) and bill length (from nostrils; hereafter “bill”) were measured using digital calipers to the nearest 1 mm (wing) or 0.1 mm (bill). The sequence of taxa and nomenclature follow Dickinson (2003).

Birds were collected at the following localities (spelling follows NGA 2011 where possible; alternative names used by expedition members are given in parentheses; collector names are added for each locality):

Andasibe (Perinet), Toamasina Province; 18.93° S, 48.42° E (Fiedler, Kreczmer and Skibiński). Primary forest in eastern Madagascar. These areas are now presumably included in the modern-day Andasibe-Mantadia National Park.

Antseza (Antsiza), Mahajanga Province; 16.22° S, 45.87° E (Kreczmer);

Antsohihy (Antsohihy), Mahajanga Province; 14.88° S, 47.99° E (Fiedler);

Lake Kinkoni (jez. Kinkoni), Mahajanga Province; 16.15° S, 45.83° E (Kreczmer);

Mahajanga (Majungo), Mahajanga Province; 15.72° S, 46.32° E (Kreczmer and Skibiński).

## SYSTEMATIC LIST

### **Podicipedidae**

*Podiceps pelzelni* Hartlaub, 1861: MIZ 32407, unsexed, 01.01.1938, Andasibe.

### **Ardeidae**

*Bubulcus ibis* (Linnaeus, 1758): MIZ 33699, ♂, 26.11.1937, 10 km south of Mahajanga.

*Ixobrychus minutus* (Linnaeus, 1766): MIZ 28448, ♀, 25.12.1937, Andasibe.

### **Anatidae**

*Anas melleri* Sclater, 1865: MIZ 31869, ♀, 14.12.1937, Andasibe.

*Nettapus auritus* (Boddaert, 1783): MIZ 33590, ♂, 06.06.1938, Lake Kinkoni at Antseza.

### **Accipitridae**

*Buteo brachypterus* Hartlaub, 1860: MIZ 32415, ♂, 04.01.1938, Andasibe; MIZ 32416, ♀, 12.12.1937, Andasibe.

*Accipiter francesii* Smith, 1834: MIZ 32419, ♀, 11.12.1937, Andasibe.

### **Falconidae**

*Falco peregrinus* Tunstall, 1771: MIZ 32417, ♂, 05.01.1938, Andasibe.

*Falco newtoni* (Gurney, 1863): MIZ 32418, unsexed, 08.12.1937, Andasibe; MIZ 32420, unsexed, 01.01.1938, Andasibe.

### **Rallidae**

*Dryolimnas cuvieri* (Pucheran, 1845): MIZ 32408, ♂, 00.01.1938; MIZ 32409, ♀, 09.01.1938, Andasibe.

*Gallinula chloropus* (Linnaeus, 1758): MIZ 32411, ♂, 25.12.1937, Andasibe; MIZ 28652, ♀, 13.10.1938, Lake Kinkoni at Antseza.

### **Turnicidae**

*Turnix nigricollis* (Gmelin, 1789): MIZ 26643, ♂, 17.07.1938, Antseza.

### **Jacaniidae**

*Actophilornis albinucha* (Geoffroy Saint-Hilaire, 1832): 28738, ♂, 12.10.1938, Lake Kinkoni at Antseza.

### **Recurvirostridae**

*Himantopus himantopus* (Linnaeus, 1758): MIZ 29023, ♂, 12.10.1938, Lake Kinkoni at Antseza.

### **Columbidae**

*Treron australis* (Linnaeus, 1771): MIZ 25768, ♀, 17.06.1938, Antseza.

*Alectroenas madagascariensis* (Linnaeus, 1766): MIZ 32404, ♂, 9.1.1938, Andasibe; MIZ 32405, unsexed, 9.1.1938, Andasibe.

*Streptopelia picturata* (Temminck, 1813): MIZ 32410, ♀, 09.12.1937, Andasibe; MIZ 32414, ♀, 17.12.1937, Andasibe, wing = 191 mm.

### **Strigidae**

*Otus rutilus* (Pucheran, 1849): MIZ 33359, ♂, 24.07.1938, unknown locality. Note: Rasmussen et al. (2000) recognized populations from western dry forests as *Otus madagascariensis* but Fuchs et al. (2007) showed that the differences are infra-specific.

## Cuculidae

- Centropus toulou* (Müller, 1776): MIZ 31884, ♀, 17.12.1937, Andasibe.  
*Coua caerulea* (Linnaeus, 1766): MIZ 32401, ♂, 11.12.1937, Andasibe; MIZ 32402, ♀, 28.12.1937, Andasibe; MIZ 32403, unsexed, 8.12.1937, Andasibe.  
*Coua reynaudii* Pucheran, 1845: MIZ 32406, unsexed, 04.01.1938, Andasibe; MIZ 32412, ♂, 14.12.1937, Andasibe.

## Psittacidae

- Coracopsis nigra* (Linnaeus, 1758): 32008, ♂, 14.12.1937, Andasibe.  
*Agapornis cana* (Gmelin, 1788): MIZ 31923, ♀, 26.11.1937, 25 km south of Mahajanga, wing = 92 mm; MIZ 31906, juv. ♀, 26.11.1937, 25 km south of Mahajanga, wing = 88 mm; MIZ 31933, 26.11.1937, 25 km south of Mahajanga, wing = 94 mm.

## Coraciidae

- Eurystomus glaucurus* (Müller, 1776): MIZ 32413, ♂, 20.12.1937, Andasibe.

## Meropidae

- Merops superciliosus* (Linnaeus, 1766): MIZ 31883, juv. 27.12.1937, Andasibe, wing = 122 mm, bill = 24.9 mm; MIZ 31872, ♀, 20.12.1937, Andasibe, wing = 139 mm, bill = 33.7 mm; MIZ 31881, ♀, 20.12.1937, Andasibe, wing = 131 mm, bill = 32.7 mm.

## Alcedinidae

- Corythornis vintsioides* (Eydoux & Gervais, 1836): MIZ 31898, juv. ♀, 09.12.1937, Andasibe, wing = 62 mm, bill = 24.9 mm; MIZ 31931, juv. ♀, 11.12.1937, Andasibe, wing = 62 mm, bill = 9.7 mm; MIZ 31910, juv. ♂, 09.12.1937, Andasibe, wing = 60 mm, bill = 9.1 mm; MIZ 31941, ♂, 26.11.1937, 25 km south of Mahajanga, wing = 58 mm, bill = 6.1 mm; MIZ 32047, ♀, 1.9.1937, Antsohihy, wing = 60 mm, bill = 7.5 mm.

## Passeriformes<sup>1</sup>

- Bernieria madagascariensis* (Gmelin, 1789): MIZ 31932, ♀, 01.01.1938, Andasibe, wing = 74 mm.  
*Bernieria zosterops* (Sharpe, 1875): MIZ 31938, ♀, 09.01.1937, Andasibe, wing = 63 mm.  
*Calicalicus madagascariensis* (Linnaeus, 1766): MIZ 31925, ♂, 28.12.1937, Andasibe, wing = 68 mm.  
*Cisticola cherina* (Smith, 1843): MIZ 31953, ♂, 16.12.1937, Andasibe, wing = 51 mm.  
*Copsychus albospecularis* (Eydoux & Gervais, 1836): MIZ 31875, ♂, 11.12.1937, Andasibe, wing = 75 mm; MIZ 31891, juv. ♂, 28.12.1937, Andasibe, wing = 74 mm. Note: Both males belong to the subspecies *C. a. inexpectatus* Richmond (1897: 688), which is the form expected to occur at Andasibe (Rand 1936, Collar 2005).  
*Coracina cinerea* (Müller, 1776): MIZ 31879, ♂, 04.01.1938, Andasibe, wing = 110 mm.  
*Cyanolanius madagascarinus* (Linnaeus, 1766): MIZ 31892, ♀, 8.12.1937, Andasibe, wing = 90 mm.  
*Dicrurus forficatus* (Linnaeus, 1766): MIZ 31886, ♂, 03.12.1937, Andasibe, wing = 131 mm; MIZ 31871, juv. ♀, 17.12.1937, Andasibe, wing = 124 mm; MIZ 31870, 07.12.1937, Andasibe, wing = 124 mm; MIZ 32020, ♀, 28.8.1937, Antsohihy, wing = 127 mm; MIZ 32016, ♀, 31.8.1937, Antsohihy, wing = 123 mm.  
*Foudia madagascariensis* (Linnaeus, 1766): MIZ 31928, ♂, 09.12.1937, Andasibe, wing = 66 mm; MIZ 31912, juv. ♂, 14.12.1937, Andasibe, wing = 69 mm; MIZ 31896, juv. ♂, 14.12.1937, Andasibe, wing = 72 mm; MIZ 31918, juv. ♂, 20.12.1937, Andasibe, wing = 69 mm; MIZ 31894, juv. ♂, 14.12.1937, Andasibe, wing = 70 mm; MIZ 31926, ♀, 20.12.1937, Andasibe,

<sup>1</sup> Considering that the taxonomy of Malagasy songbirds is in flux I refrained from partitioning the Passeriformes into families, listing the species in alphabetic order.

- wing = 61 mm; MIZ 31904, ♀, 20.12.1937, Andasibe, wing = 64 mm; MIZ 31911, juv. ♀, 28.12.1937, Andasibe, wing = 66 mm; MIZ 31913, juv. ♀, 20.12.1937, Andasibe, wing = 66 mm; MIZ 32046, ♂, 28.8.1937, Antsohihy, wing = 65 mm; MIZ 32041, ♀, 26.11.1937, 25 km south of Mahajanga, wing = 60 mm.
- Hartlaubius auratus* (Müller, 1776): MIZ 31882, ♂, 08.12.1937, Andasibe, wing = 103 mm, bill = 13.3 mm.
- Hypositta corallirostris* (Newton, 1863): MIZ 31944, ♀, 09.01.1938, Andasibe, wing = 76 mm, bill = 6.8 mm.
- Hypsipetes madagascariensis* (Müller, 1776): MIZ 31887, ♂, 28.12.1937, Andasibe, wing = 108 mm; MIZ 31878, ♂, 08.12.1937, Andasibe, wing = 113 mm; MIZ 31885, ♂, 09.12.1937, Andasibe, wing = 108 mm; MIZ 32012, ♂, 7.12.1937, Andasibe, wing = 103 mm; MIZ 32013, ♂, 27.8.1937, Antsohihy, wing = 104 mm.
- Leptopterus chabert* (Müller, 1776): MIZ 31877, ♂, 25.12.1937, Andasibe, wing = 99 mm; MIZ 31874, juv. ♂, 11.12.1937, Andasibe, wing = 97 mm; MIZ 31921, juv. ♂, 28.12.1937, Andasibe, wing = 101 mm; MIZ 31905, juv. ♀, 11.12.1937, Andasibe, wing = 93 mm; MIZ 31876, juv. ♂, 23.12.1937, Andasibe, wing = 92 mm.
- Leptopterus viridis* (Müller, 1776): MIZ 31880, ♀, 09.12.1937, Andasibe, wing = 115 mm.
- Lonchura nana* (Pucheran, 1845): MIZ 31919, ♀, 16.12.1937, Andasibe, wing = 45 mm; MIZ 31951, ♂, 15.12.1937, Andasibe, wing = 45 mm.
- Motacilla flaviventris* Hartlaub, 1860: MIZ 31900, ♂, 14.12.1937, Andasibe, wing = 82 mm; MIZ 31922, juv. ♂, 08.12.1937, Andasibe, wing = 83 mm.
- Nectarinia notata* (Müller, 1776): MIZ 31942, ♂, 31.12.1937, Andasibe, wing = 69 mm; MIZ 31899, juv. ♂, 28.12.1937, Andasibe, wing = 69 mm; MIZ 31902, juv., ♂, 03.01.1938, Andasibe, wing = 68 mm; MIZ 31948, juv. ♂, 23.12.1937, Andasibe, wing = 68 mm; MIZ 31917, 28.12.1937, Andasibe, wing = 62 mm; MIZ 31915, juv. ♂, 03.01.1938, Andasibe, wing = 67 mm; MIZ 31907, juv. ♀, 23.12.1937, Andasibe, wing = 61 mm; MIZ 31935, juv., 30.12.1937, Andasibe, wing = 66 mm; MIZ 31916, juv. ♂, 14.12.1937, Andasibe, wing = 64 mm; MIZ 31343, juv. ♀, 02.01.1938, Andasibe, wing = 64 mm; MIZ 31945, 28.12.1937, Andasibe, wing = 64 mm.
- Nectarinia souimanga* (Gmelin, 1788): MIZ 31957, ♂, 20.12.1937, Andasibe, wing = 51 mm; MIZ 31901, juv. ♂, 03.01.1938, Andasibe, wing = 54 mm; MIZ 31920, juv. ♂, 28.12.1937, Andasibe, wing = 54 mm; MIZ 31954, juv. ♂, 23.12.1937, Andasibe, wing = 55 mm; MIZ 31949, ♀, 05.01.1938, Andasibe, wing = 47 mm; MIZ 31956, juv., 17.12.1937, Andasibe, wing = 48 mm.
- Neomixis striatigula* Sharpe, 1881: MIZ 31897, ♂, 23.12.1937, Andasibe, wing = 48 mm.
- Neomixis tenella* (Hartlaub, 1866): MIZ 31950, 28.01.1938, Andasibe, wing = 46 mm. Note: This specimen was incorrectly identified as *Cryptosylvicola randianasoloi* Goodman, Langrand & Whitney (1996: 138) on the attached label.
- Nesillas typica* (Hartlaub, 1860): MIZ 31924, ♀, 09.01.1938, Andasibe, wing = 57 mm.
- Ploceus nelicourvi* (Scopoli, 1786): MIZ 31930, ♀, 09.01.1938, Andasibe, wing = 72 mm; MIZ 31893, ♂, 28.12.1937, Andasibe, wing = 75 mm; MIZ 31929, ♂, 04.01.1938, Andasibe, wing = 79 mm; MIZ 3194604.01.1938, Andasibe, wing = 74 mm.
- Pseudobias wardi* Sharpe, 1870: MIZ 31934, ♂, 14.12.1937, Andasibe, wing = 76 mm.
- Randia pseudozosterops* Delacour & Berlioz, 1931: MIZ 31937, ♂, 28.12.1937, Andasibe, wing = 53 mm; MIZ 31955, ♂, 09.01.1938, Andasibe, wing = 54 mm.
- Riparia paludicola* (Vieillot, 1817): MIZ 31927, ♀, 01.01.1938, Andasibe, wing = 90 mm.
- Saxicola torquatus* (Linnaeus, 1766): MIZ 31914, ♂, 08.12.1937, Andasibe, wing = 67 mm; MIZ 31909, juv. ♂, 15.12.1937, Andasibe, wing = 68 mm; MIZ 31936, juv. ♂, 14.12.1937, Andasibe,

wing = 67 mm; MIZ 31940, juv. ♂, 14.12.1937, Andasibe, wing = 67 mm; MIZ 31908, ♀, 28.12.1937, Andasibe, wing = 64 mm; MIZ 31895, ♀, 20.12.1937, Andasibe, wing = 62 mm. Note: These birds belong to the subspecies *S. t. sibilla* (Linnaeus, 1766: 337); see Urquhart (2002) and Collar (2005).

*Terpsiphone mutata* (Linnaeus, 1766): MIZ 31890, ♀, 11.12.1937, Andasibe, wing = 79 mm; MIZ 31888, ♀, 19.12.1937, Andasibe, wing = 78 mm; MIZ 31873, ♂, 09.01.1938, Andasibe, wing = 80 mm.

*Zosterops maderaspatanus* (Linnaeus, 1766): MIZ 31903, ♀, 17.12.1937, Andasibe, wing = 56 mm; MIZ 31958, ♂, 25.12.1937, Andasibe, wing = 57 mm; MIZ 31939, ♀, 28.12.1937, Andasibe, wing = 56 mm; MIZ 31952, ♀, 28.12.1937, Andasibe, wing = 55 mm; MIZ 31947, ♂, 16.12.1937, Andasibe, wing = 53 mm; MIZ 32042, ♂, 7.12.1937, Andasibe, wing = 58 mm.

## DISCUSSION

The distributional data obtained during the Lepecki Expedition generally accord with that collected by the *Mission Zoologique Franco-Anglo-Américaine à Madagascar* from April 1929 to May 1931 (Delacour 1932, Rand 1936) and with currently known distributions of Malagasy birds (Sinclair & Langrand 2003). The Lepecki Expedition did not record any species new to the avifauna of Madagascar. However, little is known about the distributional changes of Malagasy birds, although it is recognized that the avifauna experienced important losses during the past few millennia (Burney et al. 2004) and still faces various threats (e.g. Hawkins & Goodman 2003, Rabearivony et al. 2010). The distributional data presented above provides important background information for any future evaluation of these processes (Mlíkovský 2009).

## Acknowledgements

I thank Dominika Mierzwa (MIZ) for permission to study the collections under her care and Petr Benda (Praha), Karel Hudec (Brno) and Marcela Skuhrová (Praha) for comments on the manuscript. I was supported during the preparation of this paper by two grants from the Ministry of Culture of the Czech Republic (MK 06P04OMG008 and MK 00002327201).

## REFERENCES

- BRZEK G. 1959: Złoty wiek ornitologii polskiej [The Golden Age of Polish ornithology]. *Memorabilia Zoologica* **3**: 1–175 (in Polish).
- BURNEY D. A., BURNEY L. P., GODFREY L. R., JUNGERS W. L., GOODMAN S. M., WRIGHT H. T. & JULL A. J. T., 2004: A chronology for late prehistoric Madagascar. *Journal of Human Evolution* **47**: 25–63.
- COLLAR N. J. 2005: Family Turdidae (thrushes). Pp.: 514–807. In: DEL HOYO J., ELLIOTT A. & CHRISTIE D. A. (eds.): *Handbook of the Birds of the World. Volume 10*. Barcelona: Lynx Edicions, 895 pp.
- DELACOUR J. 1932: On the birds collected in Madagascar by the Franco-Anglo-American Expedition, 1929–1931. *Ibis* **74**: 284–304.
- DICKINSON E. C. (ed.) 2003: *The Howard and Moore Complete Checklist of the Birds of the World. Third Revised Edition*. London: Christopher Helm, 1039 pp.
- FIEDLER A. 1939: *Jutro na Madagaskar [Tomorrow to Madagascar]*. Warszawa: Towarzystwo Wydawnicze “Rój”, 279 pp (in Polish).
- FUCHS J., PONS J.-M., PASQUET E., RAHERILALAO M. J. & GOODMAN S. M. 2007: Geographical structure of genetic variation in the Malagasy Scops-Owl inferred from mitochondrial sequence. *Condor* **109**: 408–418.
- GOODMAN S. M., LANGRAND O. & WHITNEY B. M. 1996: A new genus and species of passerine from the eastern rain forest of Madagascar. *Ibis* **138**: 153–159.
- HAWKINS A. F. A. & GOODMAN S. M. 2003: Introduction to the birds. Pp.: 1019–1044. In: GOODMAN S. M. & BENSTEAD J. P. (eds.): *The Natural History of Madagascar*. Chicago: University of Chicago Press, 1728 pp.
- KAZUBSKI S. L. 1996: The history of the Museum and Institute of Zoology, PAS. *Bulletin of the Museum and Institute of Zoology PAS* **1**: 7–19.
- KOWALSKI M. A. 2006: *Kolonie Rzeczpospolitej [The Colonies of Poland]*. Warszawa: Bellona, 368 pp (in Polish).

- LEPECKI M. B. 1938: *Madagaskar. Kraj, ludzie, kolonizacja* [Madagascar. Country, People, Colonization]. Warszawa: Towarzystwo Wydawnicze "Rój", 309 pp (in Polish).
- LINNAEUS C. 1766: *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. 12th rev. ed.* Holmiae: Laurentii Salvii, 532 pp.
- MLÍKOVSKÝ J. 2007: Types of birds in the collections of the Museum and Institute of Zoology, Polish Academy of Sciences, Warszawa, Poland. Part 1: Introduction and European birds. *Journal of the National Museum (Prague), Natural History Series* **176**: 15–31.
- MLÍKOVSKÝ J. 2009: Úvod do historické ornitologie [Introduction to historical ornithology]. *Sylvia* **45**: 39–50 (in Czech).
- NGA (National Geospatial-Intelligence Agency) 2011: *Geonet Names Server*. Available from <http://earth-info.nga.mil/gns/html/index.html> (last accessed 7 January 2011).
- RABEARIVONY J., THORSTROM R., DE ROLAND L.-A. R., RAKOTONDRATSIMA M., ANDRIAMALALA T. R. A., THE SEING SAM, RAZAFIMANJATO G., RAKOTONDRAVONY D., RASELIMANANA A. P. & RAKOTOSON M. 2010: Protected area surface extension in Madagascar: Do endemism and threatened species remain useful criteria for site selection? *Madagascar Conservation & Development* **5**: 35–47.
- RAND A. L. 1936: The distribution and habits of Madagascar birds. *Bulletin of the American Museum of Natural History* **72**: 143–499.
- RASMUSSEN P. C., SCHULENBERG T. S., HAWKINS F. & VONIAVOKO R. 2000: Geographic variation in the Malagasy Scops-Owl (*Otus rutilus* auct.): the existence of an unrecognized species on Madagascar and the taxonomy of other Indian Ocean taxa. *Bulletin of the British Ornithologists' Club* **120**: 75–102.
- RICHMOND C. W. 1897: Catalogue of a collection of birds made by Doctor W. L. Abbott in Madagascar, with descriptions of three new species. *Proceedings of the United States National Museum* **19**: 677–694.
- SINCLAIR I. & LANGRAND O. 2003: *Birds of the Indian Ocean Islands*. Cape Town: Struik Publishers, 184 pp.
- URQUHART E. 2002: *Stonechats: a Guide to the Genus Saxicola*. London: Christopher Helm, 320 pp.