

THE SNAKES OF SULAWESI: A FIELD GUIDE TO THE LAND SNAKES OF SULAWESI. Ruud de Lang and Gernot Vogel. (ed). 2005. Frankfurt Contributions to Natural History Volume 25, Edition Chimaira, Frankfurt am Main. ISSN 1613-2327 ISBN 3-930612-85-2 312 p. \$69.95 (hard cover).—Available in Germany from www.chimaira.de; in the USA from Zoo Book Sales, Lanesboro, Minnesota.—Clearly, the authors of this book have reached out to a very diverse audience. The first 50 pages are devoted to background material covering a plethora of general topics. Short sections on microhabitat,

thermoregulation, activity patterns, prey, reproduction, and defense are written so as to apply to snakes in general. Another major section on the island of Sulawesi provides background on landscape, vegetation, climate, fauna in general, and biogeography. A short section on conservation introduces Indonesian government agencies, non-governmental organizations, Operation Wallacea and the status of snake conservation in Sulawesi. Nearly 20 pages are devoted to materials and methods, including detailed information on the elements within each of the species descriptions. In addition, sections on the lab and field identification of snakes, snake characters, scale nomenclature, and scale counts are included. This portion of the book ends with an abbreviated checklist of 54 "land snakes" of Sulawesi. The checklist includes representatives of the following snake families: Acrochordidae (1 species), Boidae (2), Colubridae (35), Cyliophoridae (3), Elapidae (1), Pythonidae (4), Typhlopidae (5), Viperidae (2), and Xenopeltidae (1). The authors also point out that they know of three undescribed species, two homalopsines and one calamarine.

At 210 pages the species accounts make up the bulk of the volume. Each treatment includes the scientific name, the common name, and information on distribution including a dot map, habitat, body characteristics (consisting of size, head, body, tail, color, and pattern), identification, biology, conservation status, selected literature references, and one or more photos. Taxonomic keys or tables of characteristics comparing groups or species are also found in this section. In addition, each genus is introduced by a detailed "Taxonomic notes" section.

Following the species descriptions is a short section on snake bite envenomation and a glossary of some 111 technical and semi-technical words. The literature sources section is extensive and covers both the early literature as well as recent contributions and is followed by a detailed map of snake collection localities on Sulawesi and a geographical index to each locality identified on the map and its co-ordinates. In addition, there is a huge table of basic scale-count data on all the snake species treated in the book including those mentioned under "doubtful Sulawesi records."

In terms of the snakes of Sulawesi this book is truly a one-stop shop. Nearly every imaginable topic on snakes is at least mentioned. It consolidates a great deal of information for the beginner as well as the experienced professional, and it serves as a valuable overview of the snakes of this important Indonesian island that lies adjacent to Wallace's Line. The print quality and

layout are excellent. Most of the photos are of excellent quality and beautifully reproduced. The map and geographical index to each locality near the end of the book is a real plus and adds a great deal to the usefulness of the volume.

There are a few elements in this volume that may be disappointing to some readers. Some of the figures that were taken from other sources, for example Figures 8 and 9, have incomplete explanations. Because the map in Figure 9 does not distinguish between mature evergreen lowland forest on the one hand, and degraded and early secondary forest on the other hand, it gives the impression that much of Sulawesi is well-forested. This is, in fact, not the case. Little on the eight pages under the "How to identify snakes" heading prepares the reader for using the large key to the snakes of Sulawesi on page 242. This is because some characteristics included in the key, such as the number of maxillary teeth or relative tail thickness, require some technical know-how or experience with relative features. Many snake photos in this volume are of specimens from outside of Sulawesi, sometimes collected on the Asian mainland more than 2,500 km from Sulawesi. Given the high level of endemism in Sulawesi this practice is problematical. Several photos are of preserved specimens that are of very limited value. For example, Figure 53, a photograph of the body of the holotype of *Calamorphidium acuticeps*, is of very little use.

In conclusion, this nicely produced book is an absolute must for anyone interested in the snakes of Indonesia or Sulawesi in particular. Its breadth of topics is admirable and the level of detail provided for each species makes it useful in the field or in the museum laboratory. Because the quality of production is excellent, it will make a handsome addition to any library.

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