

Amphibians and Reptiles of Mount Kinabalu (North Borneo)

Rudolf Malkmus, Ulrich Manthey, Gernot Vogel, Peter Hoffmann and Joachim Kosuch. 2002.

424 pp. A.R.G. Gantner Verlag K.G. Hardback with dj. ISBN 3-904144-83-9. Distributed by Koeltz Scientific Books, Königstein, Germany. Price € 112 / £ 80

Mount Kinabalu, or Gunung Kinabalu as it is correctly known, is a very special place. Reaching an altitude of 4095m (13,455ft), it is the highest point between the Himalayas and the highlands of New Guinea. It literally dominates the East Malaysian state of Sabah, in northeastern Borneo, the world's third largest island. As a tall mountain rising out of a tropical environment, Mt Kinabalu sits with its toes in the verdant, monsoon-drenched, lowland tropical rainforests but its beard is grass and its head is bald, the bare rock of a high mountain peak, occasionally coated with snow. Kinabalu is therefore, inhabited not only by numerous lowland animals and plants but it is also home to a vast array of localised montane endemics which show greater affinities to Himalayan flora and fauna than to their lowland rainforest neighbours. This is not therefore, a guide to the amphibians and reptiles living on a simple, insignificant mountain; this is a guide to the terrestrial lower vertebrates of an entire, enormous chunk of Borneo. To encompass the herpetofauna of this complex mountain, and its surrounding hinterland, into a single book must have been a major challenge but it is a challenge the five extremely experienced German authors have taken on, and completed admirably.

An initial section explains how to use the book and includes a map of Borneo for orientation. The Introduction that follows provides an essential summary of the topography, geology, geomorphology, climatology, zoogeography, flora and fauna of the Kinabalu region. A series of graphs accompany this section, effectively illustrating the decrease in herpetofaunal diversity with increasing altitude. This is followed by an herpetofaunal overview of Kinabalu and a fascinating set of figures which illustrates graphically the number of Borneo endemics and Kinabalu endemics on the mountain itself (193 and 19 species respectively). A look at human activities in the region, the local farmers, the tourists and the herpetologists who have pioneered research around Kinabalu, completes this section. A

graph well illustrates how Borneo is going through a new golden age of herpetological discovery with more new species being described during the 1990s than in the final decades of the 19th Century. What more encouragement to investigate tropical herpetofaunas could a student ask for at the start of the 21st Century. These figures demonstrate that 'it' will not 'all be done' by the time they get into the field; there are still many species out there, unknown to science, awaiting discovery.

The species account sections of course, take up the main body of the book. The authors set out to include all known amphibians and reptiles recorded from Mount Kinabalu and additionally any related taxa from the rest of Borneo, a total of 77 amphibian and 112 reptile species by 2000. They admit to having omitted three colubrid snakes due to a lack of reliable locality data, and they acknowledge that some lizard taxa were undergoing revision when they went to press, and could not be included. Despite these necessary omissions the authors have tried to be as up-to-date as possible and an early section of the book includes brief notes on five species that were described in the herpetological literature too late for inclusion in the main species accounts.

Each family section contains a dichotomous key to the genera and each generic section, a key to the species, as one would expect in a good quality field guide. The individual species accounts follow in a standard, easy to follow and well tested format. The information provided is excellent and well researched, with many of the frog accounts including sonagrams and oscillograms of their calls. The authors/publishers have also gone to considerable extremes to provide photographs of almost every species in this guide, a virtually impossible task when one considers the rarity of some snakes etc. To this end they have drawn on the photographic libraries of noted herpetologists and photographers worldwide and I would not be surprised to discover that some of the species illustrated here, in glorious full colour, are not to be found in any other publication. In a few cases, where no photograph exists, the authors have resorted to line drawings, more than a few prepared specifically and expertly for the current work.

So excellent is this field guide that I would say anybody with an interest in herpetology who ventures onto the island of Borneo without a copy in the top of the rucksack is making as big a mistake as leaving the mosquito repellent at home.

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