



The diversity of a snake community in a karst forest ecosystem in the central Truong Son, Vietnam, with an identification key

THOMAS ZIEGLER^{1,5}, RALF HENDRIX^{1,2}, VU NGOC THANH³, MARTINA VOGT⁴,
BERNHARD FORSTER⁴ & DANG NGOC KIEN⁴

¹AG Zoologischer Garten Köln, Riehler Straße 173, D-50735 Köln, Germany. E-mail: tziegler@zoo-koeln.de

²Zoologisches Forschungsmuseum Alexander Koenig, Adenauerallee 160, D-53113 Bonn, Germany

³Centre for Natural Resources and Environmental Studies (CRES), Vietnam National University, Hanoi, University of Science, Faculty of Biology, Department of Vertebrate Zoology, Zoological Museum, 334 Nguyen Trai Str., Thanh Xuan, Hanoi, Vietnam

⁴Phong Nha - Ke Bang National Park, Son Trach Commune, Bo Trach District, Quang Binh Province, Vietnam

⁵Corresponding author

Table of contents

Abstract	1
Introduction	2
Material and methods	3
Confirmation of species previously recorded for the Phong Nha - Ke Bang area	4
New colubrid snake records for Phong Nha - Ke Bang National Park	5
Current list of snake species known from Phong Nha - Ke Bang National Park.....	16
Species to be expected to occur within Phong Nha - Ke Bang region	20
The snake community of Phong Nha - Ke Bang compared to that of Tam Dao	21
Zoogeographical notes	24
Abundance of snake species in Phong Nha - Ke Bang	26
Spatial and temporal niche segregation of snakes in Phong Nha - Ke Bang	26
Key to the snake species recorded from Phong Nha - Ke Bang National Park and adjacent provinces	30
Acknowledgements	37
References	38

Abstract

A review of the snake diversity of Phong Nha - Ke Bang, central Truong Son, Vietnam is given. As the result of recent field work, we add nine species to the region's karst forest snake fauna: *Amphiesma* sp., *Calamaria thanhi*, *Gonyosoma prasinum*, *Liopeltis frenatus*, *Lycodon* cf. *ruhstrati*, *Lycodon* sp., *Pareas hamptoni*, *P. macularius*, and *Pseudoxenodon macrops*. The evidence of *Calamaria thanhi* from within the Phong Nha - Ke Bang National Park's borders in addition represents the second finding of this recently described and barely known species as well as the first male recorded. A topical list of the 59 snake species recorded from the area is presented (two Typhlopidae, two Xenopeltidae, two Pythonidae, five Elapidae, five Crotalidae, and 43 colubrid snakes) and compared with the snake fauna known from Tam Dao mountain ridge in northern Vietnam. Species being expected in the future to be recorded within the Phong Nha - Ke Bang region are introduced and zoogeographical aspects of the regional snake's fauna composition are discussed. Besides an overview of the spatial and temporal niche segregation of the Phong Nha - Ke Bang snake community we show the snake species abundances based on own field surveys in the period between 1998 and 2006. Finally, we provide an identification key to the snake species recorded from Phong Nha - Ke Bang and adjacent provinces in central Vietnam.