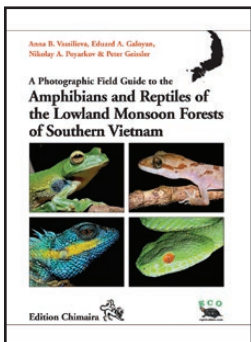


Herpetological Review, 2016, 47(4), 700–701.
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A Photographic Field Guide to the Amphibians and Reptiles of the Lowland Monsoon Forests of Southern Vietnam

Anna B. Vassilieva, Eduard A. Galoyan, Nikolay A. Poyarkov, and Peter Geissler. 2016. Edition Chimaira, Frankfurt am Main. 324 pp. Hardcover. 49.80 Euros (approximately US \$56.50). ISBN 978-3-89973-465-2.



OLIVIER S. G. PAUWELS

Department of Recent Vertebrates
Royal Belgian Institute of Natural Sciences
rue Vautier 29, B-1000 Brussels, Belgium
e-mail: osgpauwels@yahoo.fr

L. LEE GRISMER

Department of Biology
La Sierra University
4500 Riverwalk Parkway
Riverside, California 92515, USA
e-mail: lgrismer@lasierra.edu

This superb new book has been co-authored by a team of Russian and German herpetologists. Its solid binding and hard cover, with good quality glossy paper, make it easy to bring in the field. It covers 142 species (41 amphibians and 101 reptiles). Eight of the amphibian species and ten of the reptile species (respectively 19.5 and 9.9 %) covered by the guide were described in the 21st Century. Four of the amphibian species and three reptile species have even been co-described in previous contributions by the authors, who have an extensive field experience within the area. The guide includes a foreword by the Vietnamese herpetologist Nguyen Van Sang; an introduction (pp. 14–28) with information on herpetological history and geography of the region covered; a chapter on the reintroduction of the Siamese crocodile (pp. 29–31) that would have been more logically placed within the crocodile section; a chapter on how to use the guide (pp. 32–41) that provides clear and extremely useful illustrations of the diagnostic characters for each taxonomic group; the amphibian (pp. 43–127) and the reptile (pp. 129–308) species accounts; a checklist of the reptiles and amphibians of Cat Tien National Park and their conservation status (Vietnam Red List, IUCN Red List, CITES); a glossary; and a reference section. At the end are 11 pages of ads for other books published by the same publishing house, which thus represent more than 3 % of the total number of pages.

Besides the four beautiful reptile and amphibian photographs on the front cover and the authors' photographs on the back cover, the guide presents three maps, 14 biotope photographs, and 378 photographs of individuals, eggs or tadpoles (137 for amphibians, 241 for reptiles), all in color. All photographs, without any exception, are of remarkable quality. The authors have mostly presented whole-body photographs, which are most useful for species identification, and they were generally taken *in situ*. Some photographs deserve special mention, like the ones illustrating predator-prey interactions, such as on page 216, showing an *Ahaetulla prasina* (Boie, 1827) preying on a *Hemidactylus frenatus* Duméril & Bibron, 1836 (not "Schlegel, 1836" as indicated in the guide) (unfortunately the latter was

erroneously identified as a "flat-tailed house gecko", i.e., *H. platyurus* [Schneider, 1797]). A photograph shows the recently described pitviper *Trimeresurus rubeus* preying on an unidentified tree frog, which is actually *Polypedates megacephalus* (Poyarkov, pers. comm.). Eleven amphibian species are shown in amplexus. All photographs are accompanied by a mention of the Vietnamese province in which they were taken, which greatly increases their value, even if it would have been much better to have precise localities. The vast majority of the photographs were taken in Vietnam, which decreases the risk of illustrating populations that might be later shown to belong to a different taxon than the one found in the area covered by the guide. There are just a few exceptions: a *Varanus salvator* from "Indonesia," captive *Python bivittatus* without locality, a *Gonyosoma oxycephalum* from "Thailand," a *Ptyas mucosa* from Hainan, and *Heosemys annandalii* from "Cambodia". The Indonesian monitor was more precisely photographed in Ujung Kulon National Park, western Java (A. Vassilieva, pers. comm.). Some photographs show species never illustrated alive before, such as *Oligodon saintgironsi*, which had been described in 2008 based on long-preserved museum specimens. All species were illustrated by at least one photograph, often several.

The "guide structure" section of the book explains that it "includes the illustrated accounts of 142 common or reliably documented species of amphibians and reptiles inhabiting the forests of Cat Tien National Park and adjacent lowland and hilly areas of southern Vietnam." Given this explanation, the absence of accounts for many species is surprising. Among them, numerous species recorded from lowland or hilly forested localities directly adjacent to the park or in neighboring provinces, such as *Cyrtodactylus dati* Ngo, 2013, *C. huynhi* Ngo & Bauer, 2008, *C. takouensis* Ngo & Bauer, 2008, *Gekko russelltraini* Ngo, Bauer, Wood & Grismer, 2009, *Takydromus madaensis* Bobrov, 2013 (still known only by its holotype but regarded as a valid species in the guide, although the authors couldn't find any additional specimens at the type locality; Poyarkov, pers. comm.). The list of species would have been greater if it included all species living in southern Vietnam, especially the offshore islands, i.e., the entire geographic area shown in the guide's map (fig. 2) extending from Dak Lak Province in the north to the southern tip of Ca Mau Province and all the associated islands in Rach Gia Bay. The herpetofauna of this region is diverse and contains a number of endemic species (Grismer and Ngo 2007; Grismer et al. 2008, 2011, 2015; Ngo et al. 2008). The inclusion of the Phu Quoc Island and the Con Dao Archipelago hundreds of kilometers from each other and hundreds of kilometers south of any of their other study sites emphasizes the absence of coverage throughout the entire Lower Mekong basin. Only some of these species are listed in the "confusing species" section of each species account. In this respect, the title of the guide is misleading, as it should have stated that it covers mostly Cat Tien National Park, not all the lowland monsoon forests of southern Vietnam. The global distribution indicated for each species is generally correct, rarely incomplete, like in the case of *Ptychozoon trinotaterra*, said to occur in "Thailand, Vietnam, possibly Cambodia," although it has been documented from Cambodia (Hartmann et al. 2014) and Laos (Teynié et al. 2014).

According to a taxonomic revision published after the guide (Yuan et al. 2016) and co-authored by one of the guide's authors, the population of *Microhyla fissipes* in southern Vietnam is actually referable to the recently described *M. mukhlesuri* (Hasan et al. 2014).

The appendix providing a list of the amphibian and reptile species known thus far from Cat Tien National Park shows an asterisk near the species that were recorded in literature sources but whose “presence in Cat Tien was not confirmed during the long-term survey by the authors.” These 21 species marked with an asterisk are not included in the species accounts, except for five (*Glyphoglossus molossus*, *Hylarana macrodactyla*, *Lygosoma bowringii*, *Python bivittatus* and *Oligodon fasciolatus*). On the other hand, *Rhacophorus helenae*, *Dixonius vietnamensis*, *Hypsicopus plumbea*, *Ahaetulla nasuta*, *Dendrelaphis subocularis*, *Rhynchophis prasinus*, and *Amphiesma stolatum*, not listed for Cat Tien National Park, are included in the species accounts. The decision to include or exclude species from the species accounts is thus a bit arbitrary and forces the reader to be equipped with more general reptile or amphibian guides to make sure that all the species present in the area are envisaged before attempting identification.

The text for each species account includes the English and Vietnamese common names (the latter written without the Vietnamese accents), and sections on size, identification, global distribution, morphological and color description, ecology and habitat, activity, reproduction, confusing species, references, and for some species additional notes.

We note that the proper taxon authorship of *Boiga siamensis* is “Nootpand, 1971,” not “Nutaphand, 1971” (Pauwels et al. 2005). There is no indication why the Red-tailed Ground Skink has been referred to as “*Scincella* cf. *rufocaudata*” and the Buonloi Forest Skink as “*Sphenomorphus* cf. *buenloicus*.”

The maximum total length of *Xenochrophis flavipunctatus* is indicated as 1100 mm. The largest documented specimens are 1275 mm in total length, and extrapolations based on individuals with broken tail indicate a possible total length of 1368 mm (Chanhome et al. 2001). Following the recent description of *Malayemys isan* by Sumontha et al. (2016), we confirm the identification of the individual shown on pages 296–297 as *M. subtrijuga* based on its possession of six nasal stripes and the contact between the infra- and the supraorbital stripes. A few more words could have been added to the glossary, in particular paravertebral, pentadactyl, postoccipital, presubocular, and subocular that are used in various species accounts.

We have only two regrets for the guide. First, the absence of identification keys, even to family level, especially given the extensive herpetofaunal knowledge of the authors and the relatively limited number of species treated. Second, the non-exhaustive literature cited. We would have preferred that the literature provide an extensive list of works published on the reptiles and amphibians of the area covered by the guide, including those in Vietnamese and Russian. In our opinion, the literature cited (146 references) includes too many general works that are not bringing specific information on the region covered.

These few shortcomings should not obscure the fact that this new book is a remarkable piece of work, resulting from extensive field survey, an extensive knowledge of the local species, and great photographic skills. It is a most useful tool for field workers in the area and a beautiful book to consult for all naturalists. We strongly encourage our colleagues and natural history libraries to purchase it.

Acknowledgments.—We thank Nikolay Poyarkov and Anna Vasilieva for useful information and Thomas P. C. Pauwels for constructive discussions.

LITERATURE CITED

- CHANHOME, L., O. S. G. PAUWELS, P. JINTAKUNE, AND P. DAVID. 2001. Catalogue of the herpetological collections of the Queen Saovabha Memorial Institute, Thai Red Cross Society, Bangkok. Part I. Snakes (except Elapidae and Viperidae). Bull. Maryland Herpetol. Soc. 37(2):49–72.
- GRISMER, L. L., J. L. GRISMER, P. L. WOOD, JR., V. T. NGO, T. NEANG AND K. O. CHAN. 2011. Herpetology on the fringes of the Sunda Shelf: a discussion of discovery, taxonomy, and biogeography. Bonn. Zool. Monogr. 57:57–97.
- , AND V. T. NGO. 2007. Four new species of the gekkonid genus *Cnemaspis* Strauch 1887 (Reptilia: Squamata) from southern Vietnam. Herpetologica 63:482–500.
- , ———, AND J. L. GRISMER. 2007. A new species of insular pitviper of the genus *Cryptelytrops* (Squamata: Viperidae) from southern Vietnam. Zootaxa 1715:57–68.
- , P. L. WOOD, JR., V. T. NGO AND M. L. MURDOCH. 2015. The systematics and independent cave evolution of ecomorphology in distantly related clades of bent-toed geckos (genus *Cyrtodactylus* Gray, 1827) from the Mekong Delta and islands in the Gulf of Thailand. Zootaxa 3980:106–126.
- HARTMANN, T., A. B. BETTS, S. DE GREEF, AND F. IHLLOW. 2014. First record of the rare parachute gecko *Ptychozoon trinitoterra* Brown, 1999 from Cambodia. Cambodian J. Nat. Hist. 1:8–11.
- HASAN, M., M. M. ISLAM, M. KURAMOTO, A. KURABAYASHI, AND M. SUMIDA. 2014. Description of two new species of *Microhyla* (Anura: Microhylidae) from Bangladesh. Zootaxa 3755(5):401–418.
- NGO, V. T., L. L. GRISMER, AND J. L. GRISMER. 2008. A new cave dwelling species of *Cyrtodactylus* Gray, 1827 (Squamata: Gekkonidae) in Kien Giang Biosphere Reserve, Southwestern Vietnam. Zootaxa 1967:53–62.
- PAUWELS, O. S. G., P. DAVID, L. CHANHOME, G. VOGEL, T. CHAN-ARD, AND N. L. ORLOV. 2005. On the status of *Boiga ocellata* Kroon, 1973, with the designation of a neotype for *Boiga siamensis* Nootpand, 1971 (Serpentes, Colubridae). Russ. J. Herpetol. 12(2):102–106.
- SUMONTHA, M., T. R. BROPHY, K. KUNYA, S. WIBOONATHAPOL, AND O. S. G. PAUWELS. 2016. A new snail-eating turtle of the genus *Malayemys* Lindholm, 1931 (Geoemydidae) from Thailand and Laos. Taprobanica 8(1):1–19.
- TEYNIÉ, A., T. Q. NGUYEN, O. LORVELEC, A. PIQUET, A. LOTTIER, AND P. DAVID. 2014. Amphibiens et reptiles du Laos: nouvelles données nationales et provinciales. Bull. Soc. Herpétol. de France 151:21–52.
- YUAN, Z.-Y., C. SUWANNAPOOM, F. YAN, N. A. POYARKOV, S. N. NGUYEN, H. CHEN, S. CHOMDEJ, R. W. MURPHY, AND J. CHE. 2016. Red River barrier and Pleistocene climatic fluctuations shaped the genetic structure of *Microhyla fissipes* complex (Anura: Microhylidae) in southern China and Indochina. Curr. Zool. 2016:1–13.