

## Book Review

# When a bookreview is not sufficient to say all: an in-depth analysis of a recent book on the snakes of Thailand, with an updated checklist of the snakes of the Kingdom

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## INTRODUCTION

The past decade has been marked by the publication of several general books on the herpetology of Thailand and West Malaysia, due to a strong renewal of interest in the fauna of this very rich region with research inputs from both local and foreign herpetologists. In addition to theses published in Thailand by local students (for example: Niyomwan, 1999), we may cite Cox (1991), Lim and Lim (1992), Jintakune and Chanhome (1995), Manthey and Grossmann (1997), Cox et al. (1998), and Chan-ard et al. (1999). All these publications have very positive points of their own, and, although focused on the herpetofauna of the same region, have different scopes and ways of treating their subject. Recent synthetic papers more specifically treating regional fauna have also appeared, such as Pauwels et al. (2000; 2003) and Grossmann and Tillack (2001a-b).

Nevertheless, the composition and distribution of the reptile fauna of Thailand, in spite of these researches, remain very poorly known, as shown in Pauwels et al. (2000).

Any new book on the snake fauna of Thailand may be regarded as a welcome addition. The publication of Mr. Wirot Nutphand's latest opus, cited and described below, is hence a noteworthy event. This author (referred to below throughout the present paper as WN) has long been known, if not notorious, for his publications on the snakes of Thailand, of which we may cite Nootpand (1971) and Thumwipat and Nutphand (1982), and numerous contributions published during the 1980's in the series of the *Thai Zoological Centre* published by the Pata Zoo in Bangkok. Nootpand and Nutphand are different spellings of the same name, as there is no standard system of transliteration from the Thai alphabet into the Roman alphabet.

Unfortunately, this book is plagued with such a large number of mistakes, misspellings, misidentifications and incredible confusion of

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taxonomy that, far from being the promised major addition, it is likely to become a dangerous tool for any relatively inexperienced reader or anybody having little knowledge of Thai snakes. We must say at once that we have yet to encounter any book with so many errors. As a help, if not a tool, for herpetologists and conservationists working on the snakes of Thailand and Southeast Asia we decided to write not a mere book review, but to publish an in depth analysis of this book, focusing mainly on its taxonomical, distributional and ecological mistakes. We cannot pretend to have been exhaustive, and by no way we can affirm that the list of mistakes is complete.

#### DESCRIPTION

NUTPHAND, Wirot (2001), *Patterns of the Snakes of Thailand*. Amarin Printing and Publishing Public Co., Ltd., Bangkok.

Hardbound, 319 pages, about 515 photographs, mostly in color, many ink drawings, one map. In Thai throughout, with title and snake common names in English.

Upon opening of the parcel containing it, one will undoubtedly find this book very appealing indeed. It is a thick, robust volume of a convenient size with a beautiful and well designed dust jacket composed of eight narrow horizontal color pictures, each showing a part of the body of a snake species. This nice composition is reproduced on the cover of the book itself, on both back covers of the book and on the dust jacket. A high quality glossy paper is used throughout the book, and there are many color pictures. We insist here that, at (very) first glance this book looks like a welcome addition to the bibliography of Asian fauna. We, however, strongly invite the reader to not skip this review at this point and to read the extensive comments and analysis appearing below.

The book can be divided into four parts of unequal length, as follows:

(I) Introduction (pp. 1-38), divided into (1) a preface, in which WN explains that this book and all of its information are based entirely on his 30 years of experience, an affirmation which probably explains the lack of bibliography; (2) the contents, giving only Thai and English names, the latter ones being those used by WN and not necessarily those widely used elsewhere (see below); (3) a very sketchy map of Thailand, showing only the limits of six arbitrarily defined Thai Regions; and (4) a general description of snakes, with Thai and English nomenclature of body and head scalation, skull, and considerations of venomous snakes and venom apparatus. One of the stated goals of this book is to explain to the readers the nomenclature of snake scalation. The choice of *Naja kaouthia* (p. 19) is quite unfortunate, as the loreal scale is lacking in the genus *Naja*. Furthermore, the nomenclature presented for subcaudal scales is fanciful.

(II) A checklist of Thai snakes (p. 39-48), arranged by families and subfamilies, with Thai and scientific names.

The checklist is followed by a page explaining the pictograms used to summarize the biology and distribution of the species in the species accounts. The biology is divided into six pictograms: diurnal activity, nocturnal activity (no pictogram for mixed or crepuscular activities), arboreal ("on the tree"), terrestrial ("on the ground"), burrower ("under the ground"), aquatic ("in the water"), or marine ("in the sea"). Another series of three pictograms is related to the potential danger of the taxa, merely distinguished into "non poisonous", "mildly poisonous" and "poisonous snake". The last series is related to the distribution of the species, divided into seven pictograms each depicting a minute map of Thailand with the selected region appearing in black (All over the country, North, South, Isaan [namely Northeastern Thailand], West, and Central Thailand respectively; plus one pictogram for "all parts except central"). Needless to say in detail, these maps are

virtually useless. Last, a pictogram is used to denote a rare species.

(III) The main part, namely the species accounts (pp. 50-312), the detailed content of which will be extensively discussed below.

(IV) A concluding part (pp. 314-319), divided into three parts:

(1) Other considerations of venomous snakes (pp. 314-315), written in green characters on a black background;

(2) A conclusion (pp. 318-319); and

(3) An ink-line autoprotrait of WN surrounded with snakes on a deep red background as a last, unnumbered page.

There are no acknowledgments, or, more worrying, no bibliography at all. The author explains clearly that this book is entirely based on his own experience.

The most serious shortcoming of the book is the treatment of the species. WN's species account usually spans two pages, including the scientific name and its author(s), followed by the Thai and English common names, a series of four minute pictograms meant to summarize the period of activity, the biotope, the potential danger the species poses to mankind, and the (very coarse) distribution of the species respectively, with from one to three or four color pictures (seldom in black and white), an ink drawing of the snake head, sometimes replaced by a series of mostly useless close-up pictures. There is no explanatory text, no morphological data, and, more worrying, no indication of the locality of the depicted specimens. Obviously, one would have expected far more informative data and not these generalizations from an author self-regarded as a leading expert on Thai snakes. The potential value of this publication is hence considerably decreased, and any scientific aspect is at once sent deep inside the dungeon.

Photographs of flank scale rows are either directed to the right (namely the tail end is on the right), for example on pages 59, 73, 74, 77, etc.), or to the left (pp. 57, 65, 69, 71, 79,

etc.), or even in both directions on a single page (pp. 61, 97, 157, and others).

However, this lack of care in the preparation and the paucity of the information are the lesser of many drawbacks of this book compared to the incredible amount of mistakes, contained in nearly every page, as shown in the next part.

## HERPETOLOGICAL ANALYSIS

A book review usually only deals with the most serious problems and mistakes. However, because this book might become a tool for students of Thai snake fauna, we think it is necessary to point out the many mistakes in a more detailed way. We will ignore the Introduction and concentrate on parts (II) and (III), dealing mostly with taxonomy, distribution, and biology of taxa to establish as complete a list of errors as possible. Mistakes can be classed into four main categories: (1) erroneous identifications; (2) mistakes in the scientific names and their authors and date of description. In most cases, errors in the former two categories denote a complete ignorance of the taxonomic rules and snake systematics, and/or very careless preparation of the manuscript; (3) errors in provided distributions and biological information; and (4) use of odd or unusual English names.

The checklist of Thai snakes on pages 40-48 (Part II) is a mere list of the taxa recognized by WN. Rather than enumerating at length the numerous taxonomical mistakes, we placed in Table 1 mistakes relevant to points (1) and (2), where we provide the equivalences between names provided by the author, cited *verbatim*, and our own determination or corrected scientific names. Comments on and explanations of the corrections listed in this table appear in the respective specific accounts. Some comments appear in notes below the table for taxa that do not benefit from a detailed account. Only taxa requiring a correction are listed in Table 1.

Table 1. Corrected taxonomy and determinations in WN's checklist

Page	WN's determination or misspelling (verbatim)	Corrected determination or spelling
40	Typhlopidae Gunther, 1845	Typhlopidae Günther, 1825 (1) (2)
40	<i>Ramphotyphlops</i> (for all listed species)	<i>Ramphotyphlops</i>
40	Xenopeltidae Cope, 1864	Xenopeltidae Bonaparte, 1845 (1)
41	Anilidae M. Smith, 1943	Aniliidae Stejneger, 1907 (1)
41	Boidae Gray, 1766	Boidae Gray, 1825 (1) (3)
41	<i>Python molurus bivittatus</i> Schlegel, 1837	<i>Python molurus bivittatus</i> Kuhl, 1820
41	<i>Python curtus brongersmai</i> Sluhl, 1881	<i>Python brongersmai</i> Stull, 1938
41	Dipsadid tinae Wagler, 1822	Dipsadidae Bonaparte, 1838 (1), (4)
41	<i>Parea</i> (for all listed species)	<i>Pareas</i>
41	<i>Parea carinatus</i> (Boie), 1828	<i>Pareas carinatus</i> Wagler, 1830 (5)
41	<i>Parea hamtoni</i> (Boulenger), 1905	<i>Pareas hamptoni</i> (Boulenger, 1905)
41	Colubridae Boulenger	Colubridae Oppel, 1811
41	Xenoderminae Cope, 1988	Xenoderminae Gray, 1849 (1)
42	Sibynophinae Fitzinger, 1843	No longer recognized (1) (6)
42	<i>Sibynophis triangularis</i> Taylor and Elbel, 1958	<i>Sibynophis collaris</i> (Boie, 1826)
42	<i>Sibynophis callaris</i> (Gray), 1853	<i>Sibynophis collaris</i> (Boie, 1826)
42	Acrochordinae Jan, 1863	Acrochordidae Bonaparte, 1831 (7)
42	<i>Acrochordus granulatus</i> Schneider, 1799	<i>Acrochordus granulatus</i> (Schneider, 1799)
42	Subfamily Colubridae Cope, 1790	Colubrinae Oppel, 1811
42	<i>Gonyosoma floweri</i> (Werner), 1943	<i>Gonyosoma oxycephalum</i> (Boie, 1827) (8)
42	<i>Gonyosoma janseni</i> Bleeker, 1858	<i>Gonyosoma oxycephalum</i> (Boie, 1827) (9)
42	<i>Gonyosoma janseni elegans</i> (Werner), 1925	<i>Gonyosoma oxycephalum</i> (Boie, 1827)
42	<i>Gonyosoma oxycephalum</i> (Boie in Boie), 1890	<i>Gonyosoma oxycephalum</i> (Boie, 1827) (8)
42	<i>Gonyosoma prasina</i>	<i>Gonyosoma prasinum</i> (10)
42	<i>Elaphe taeniura</i> (Cope), 1864	<i>Orthriophis taeniurus</i> (Cope, 1861) (10)
42	<i>Elaphe taeniura ridleyi</i> (Butler), 1627	<i>Orthriophis taeniurus ridleyi</i> (Butler, 1899)
42	<i>Elaphe radiata</i> (Schlegel), 1890	<i>Coelognathus radiatus</i> (Boie, 1827) (10)
42	<i>Ptyas mucosus</i>	<i>Ptyas mucosa</i> (11)
42	<i>Ptyas carinatus</i> (Gunther), 1864	<i>Ptyas carinata</i> (Günther, 1858) (11)
43	<i>Ptyas zoa zys</i>	<i>Ptyas fusca</i> (Günther, 1858); see the account
43	<i>Senelapsis sexagonotus</i> Gunther, 1864	<i>Xenelaphis hexagonotus</i> (Cantor, 1847)
43	<i>Lycodon subsinctus</i> (Boie), 1827	<i>Lycodon subsinctus</i> Boie, 1827
43	<i>Lycodon fasciatus</i> [as Black Long Wolf Snake]	<i>Lepturophis albofuscus</i> (Duméril, Bibron & Duméril, 1854) (12)
43	<i>Lycodon capuncinus</i> (Boie), 1827	<i>Lycodon capucinus</i> (Boie in Boie, 1827)
43	<i>Oligodon jognsoni</i> M. Smith, 1917	<i>Oligodon joysoni</i> (Smith, 1917) (13)
43	<i>Oligodon taeniurus</i> Gunther, 1894	<i>Oligodon taeniatus</i> Günther, 1861
43	<i>Oligodon cyclurus smithi</i> (Werner), 1925	<i>Oligodon cyclurus smithi</i> (Werner, 1925), now <i>Oligodon fasciolatus</i> (Günther, 1864)
43	<i>Oligodon peerpurascens</i> (Schlegel), 1837	<i>Oligodon purpurascens</i> (Schlegel, 1837)
43	<i>Oligodon quadrilineatus</i> (Jan), 1865	<i>Oligodon taeniatus</i> (Günther, 1861)
43	<i>Oligodon darsolateralis</i> (Wall), 1914	<i>Oligodon cyclurus</i> (Cantor, 1839)
43	<i>Oligodon swinhonis</i> Gunther, 1864	<i>Oligodon cinereus</i> (Günther, 1864)
43	<i>Oligodon cineveus multifasciatus</i> (Jan), 1864	<i>Oligodon cinereus</i> (Günther, 1864)
43	<i>Oligodon inornatus</i> (Boulenger), 1914	<i>Oligodon inornatus</i> (Boulenger, 1914)
43	<i>Liopeltis tricolor</i> (Schlegel), 1832	<i>Liopeltis tricolor</i> (Schlegel, 1837) (14)
43	<i>Liopeltis baliodeira</i> (Boie), 1827	<i>Gongylosoma baliodeira</i> (Boie, 1827) (15)
43	<i>Dryocalamus subannulatus</i>	<i>Dryocalamus subannulatus</i> (Duméril, Bibron & Duméril, 1854)
43	<i>Pseudoxenodon macrops</i> (Blyth), 1854	<i>Pseudoxenodon macrops</i> (Blyth, 1854)
43	<i>Calamaria leucocephalus</i> Dumeril, Bibron and Dumeril, 1854	<i>Calamaria schlegeli</i> Duméril, Bibron & Duméril, 1854 (16)
43	<i>Calamaria uniformis</i> M. Smith, 1921	<i>Calamaria pavimentata</i> Duméril, Bibron & Duméril, 1854

Table 1. Corrected taxonomy and determinations in WN's checklist – continued.

Page	WN's determination or misspelling (verbatim)	Corrected determination or spelling
44	<i>Calamaria pavementatus</i> Dumeril, Bibron and Dumeril, 1854	<i>Calamaria pavementata</i> Duméril, Bibron & Duméril, 1854
44	<i>Calamaria siamensis</i> Gunther, 1864	<i>Calamaria pavementata</i> Duméril, Bibron & Dumeril, 1854
44	<i>Dendrelaphis pictus</i> (Gmelin), 1788	<i>Dendrelaphis pictus</i> (Gmelin, 1789)
44	<i>Dendrelaphis striatus</i> (Cohn), 1905	<i>Dendrelaphis striatus</i> (Cohn, 1905)
44	<i>Xenochrophis piscator</i> (Schneider), 1799	<i>Xenochrophis piscator</i> (Schneider, 1799) and <i>Xenochrophis flavipunctatus</i> (Hallowell, 1861) See in the accounts
44	<i>Sinonatrix percarinata</i>	<i>Sinonatrix percarinata</i> (Boulenger, 1899) [species mentioned twice in the checklist]
44	<i>Amphiesma inas</i> (Laedlaw), 1901	<i>Amphiesma inas</i> (Laidlaw, 1901)
44	<i>Amphiesma groundwateri</i> (Smith), 1892	<i>Amphiesma groundwateri</i> (Smith, 1921)
44	<i>Amphiesma deschauenseei</i> (Talar), 1893	<i>Amphiesma deschauenseei</i> (Taylor, 1934)
44	<i>Parahelicops boonsongi</i> (Tacar and Elbe), 1958	<i>Parahelicops boonsongi</i> Taylor & Elbel, 1958
44	<i>Macropisthodan flaviceps</i> (Dumeril, Bibron and Dumeril, 1854)	<i>Macropisthodan flaviceps</i> (Duméril, Bibron & Duméril, 1854)
44	<i>Macropisthodan rhodomelas</i> (Boie), 1827	<i>Macropisthodon rhodomelas</i> (Boie, 1827)
44	<i>Rhabdophis subminiatus helleri</i> K. Schmidt, 1925	<i>Rhabdophis subminiatus helleri</i> (Schmidt, 1925)
45	<i>Rhabdophis stolatus</i> (Linnaeus), 1758	<i>Amphiesma stolatum</i> (Linnaeus, 1758)
45	<i>Rhabdophis chrysargus</i> (Boie), 1827	<i>Rhabdophis chrysargus</i> (Schlegel, 1837)
45	<i>Rhabdophis trianguliger</i> Boie, 1827	<i>Xenochrophis trianguligerus</i> (Boie, 1827)
45	<i>Boiga mahasomi</i> Nutphand, 1983	<i>Boiga saengsomii</i> Nutphand, 1985
45	<i>Boiga cynodan</i> (Boie), 1827	<i>Boiga cynodon</i> (Boie, 1827)
45	<i>Ahaetulla</i>	(17)
45	<i>Dryophiops rubescens</i> (Gray), 1827	<i>Dryophiops rubescens</i> (Gray, 1834)
45	<i>Psammophis condanarus</i> (Merrem), 1820	<i>Psammophis indochinensis</i> Smith, 1943
45	<i>Enhydriis smithi</i> (Boulenger), 1914	<i>Enhydriis innominata smithi</i> (Boulenger, 1914)
45	<i>Bitia rydroides</i> Gray, 1842	<i>Bitia hydroides</i> Gray, 1842
46	<i>Gerarda prevostiana</i> (Eydoux and Gervais), 1831	<i>Gerarda prevostiana</i> (Eydoux & Gervais, 1837)
46	<i>Erpeton tentaculatum</i> Lacepede, 1801	<i>Erpeton tentaculatum</i> Lacepède, 1800
46	Elapidae Boie	Elapidae Boie, 1827 (1) (18)
46	<i>Naja naja kaouthia</i> Lesson, 1831	<i>Naja kaouthia</i> Lesson, 1831
46	<i>Naja naja siamensis</i> Nutphand, 1980, new sp.	<i>Naja siamensis</i> Laurenti, 1768
46	<i>Naja naja sumatranus</i> Var	<i>Naja sumatrana</i> Müller, 1887
46	<i>Naja naja isanensis</i> (Nutphand), 1980, new sp.	<i>Naja siamensis</i> Laurenti, 1768
46	<i>Naja kaouthia suphandensis</i> (Nutphand), 1989, new sp.	<i>Naja kaouthia</i> Lesson, 1831
46	<i>Ophiophagus hannah</i> (Cantor)	<i>Ophiophagus hannah</i> (Cantor, 1836)
46	<i>Maticora bivirgata flaviceps</i> (Boie), 1827	<i>Calliophis bivirgatus flaviceps</i> (Cantor, 1839)
46	<i>Calliophis malcomi</i> nov. nom. 1914	<i>Calliophis maculiceps</i> (Günther, 1858) (19)
47	Hydrophiidae Boie	Hydrophiidae Fitzinger, 1843 (1)
47	<i>Kerilia jerdoni</i> Gray, 1849	<i>Kerilia jerdonii</i> Gray, 1849
47	<i>Disteira stokesii</i> (Gray), 1846	<i>Astrotia stokesii</i> (Gray, 1846)
47	<i>Thalassophis amandalei</i> (Laedlaw), 1901	<i>Kolpophis amandalei</i> (Laidlaw, 1901)
47	<i>Lapensis curtus</i> Shaw, 1802	<i>Lapemis curtus</i> (Shaw, 1802)
47	<i>Microcephalophis gracilis</i> Shaw, 1802	<i>Hydrophis gracilis</i> (Shaw, 1802)
47	<i>Hydrophis bituberculatus</i> Peter, 1872	<i>Hydrophis bituberculatus</i> Peters, 1873
47	<i>Hydrophis inornatus</i> (Gray), 1849	Australasian species, unknown from Thailand
48	<i>Hydrophis obscurus</i> Daudin, 1803	Indian species, unknown from Thailand
48	<i>Hydrophis torquatus</i> Gunther, 1864	<i>Hydrophis torquatus</i> Günther, 1864
48	<i>Pelamis platurus</i> (Linnaeus), 1766	<i>Pelamis platura</i> (Linnaeus, 1766)
48	<i>Daboia russellii siamensis</i> M. Smith, 1943	<i>Daboia russellii siamensis</i> (Smith, 1917)
48	<i>Trimeresurus purpureomaculatus</i> (Gray), 1830	<i>Trimeresurus purpureomaculatus</i> (Gray, 1832)

Table 1. Corrected taxonomy and determinations in WN's checklist – continued.

Page	WN's determination or misspelling (verbatim)	Corrected determination or spelling
48	<i>Calloselasma rhodostoma</i> Boie, 1827	<i>Calloselasma rhodostoma</i> (Boie in Boie, 1827)
48	<i>Trimeresurus albolabris</i> Gray, 1842	<i>Trimeresurus albolabris</i> (Gray, 1842) (20)
48	<i>Trimeresurus popeorum</i> Smith, 1937	<i>Trimeresurus popeiorum popeiorum</i> Smith, 1937
48	<i>Trimeresurus purpureomaculatus</i> (Gray), 1830	<i>Trimeresurus purpureomaculatus</i> (Gray, 1832)
48	<i>Trimeresurus wiroti</i> , 1989	<i>Trimeresurus wiroti</i> Trutnau, 1981, now <i>T. borneensis</i> (Peters, 1872) (21)
48	<i>Trimeresurus pumceus</i> (Boie), 1827	<i>Trimeresurus puniceus</i> (Kuhl, 1824) [not present in Thailand]

### Notes on Table 1:

(1) - See David and Ineich (1999: 16-17) for the authorships of taxa at the familial level.

(2) - WN lists only nine species in the family Typhlopidae, although currently 12 species are known from Thailand (see in Appendix).

(3) - There are five “kinds” (without comment) included in the Boidae listed by WN, because the author lists both *Python curtus*, with two morphs which he refers to in Thai as “small-headed” and the “black”, and *Python curtus brongersmai*, now *Python brongersmai* (see Shine et al., 1999).

(4) - This taxon is currently regarded as a subfamily of the Colubridae. It might, however, deserve a familial status (N. Vidal, pers. comm., April 2002).

(5) - As can be seen from the original description, *Amblycephalus carinatus* Boie, 1828 is a nomen nudum.

(6) - A taxon no longer recognized (see, for example, the summary of the current classification of snakes presented in David and Ineich, 1999).

(7) - A taxon now widely regarded as a family distinct from Colubridae (see McDiarmid et al., 1999 for a discussion).

(8) - WN lists five taxa in the genus *Gonyosoma*, but only *Gonyosoma oxycephalum* and *Gonyosoma prasinum* are found in Thailand. *G. flowerii* and *G. elegans* are not recognized as valid (see below). Utiger et al. (2002) suggested that *Coluber prasinus* Blyth, 1854, shows close affinities with the genus *Gonyosoma*, a position that we follow here. The nominal genus *Gonyosoma* has been

regarded as a synonym of the genus *Elaphe* by Schulz (1996), but is usually recognized as valid by most authors, including Helfenberger (2001) and Utiger et al. (2002).

(9) - WN intended to merely recopy Taylor (1965), but greatly misunderstood the account provided by this latter author. *Gonyosoma janseni* Bleeker, 1858 is a valid species, but endemic to Sulawesi, Indonesia, as clearly stated by Taylor (1965). This latter author tentatively followed Werner (1925) in including in the fauna of Thailand *Gonyosoma janseni elegans* Werner, 1925, supposed to have been described from “Siam”. This nominal taxon merely represents one of the several color morphs of *Gonyosoma oxycephalum*, and was synonymized with this latter species by Smith (1943). WN incorrectly spelled the subspecies nomen *elegans*, a lapsus for *elegans*. *Gonyosoma flowerii* (Werner, 1925) also represents a brown morph of *Gonyosoma oxycephalum* (see Schulz, 1996).

(10) - Genus *Elaphe*: we follow Helfenberger (2001) and Utiger et al. (2002), who revised the genus *Elaphe* auctorum and reassigned many species to resurrected and newly described genera. WN lists five species and subspecies. According to Schulz (1996), seven taxa are known from Thailand. The Thai species are now placed in the genera *Coelognathus* Fitzinger, 1843 (*C. flavolineatus*, *C. radiatus*), *Oreophis* Utiger, Helfenberger, Schätti, Schmidt, Ruf and Ziswiler, 2002 (*O. porphyraceus*), and *Orthriophis* Utiger, Helfenberger, Schätti, Schmidt, Ruf and Ziswiler, 2002 (*O. taeniurus*); *Coluber prasinus*

Blyth, 1854 is referred to the genus *Gonyosoma*.

(11) - The generic nomen *Ptyas* is feminine (see David and Das, 2004).

(12) - Genus *Lycodon*: WN lists five species, whereas six are known (see in Appendix). WN lists two kinds of *Lycodon fasciatus*, with two different Thai names, “Black and white Wolf Snake” and “Black Long Wolf Snake” respectively (see below, the latter one being *Lepturophis albofuscus* (Duméril, Bibron and Duméril, 1854)). The genus *Lepturophis* Boulenger, 1900 is hence missing in the book; see under the account of *Lycodon fasciatus*.

(13) - Genus *Oligodon*. WN lists ten species (of which, by the way, eight contain misspellings in their names). *Oligodon swinhonis* Günther, 1864 was regarded as a synonym of *Oligodon cinereus* by Boulenger (1894), followed by Smith (1943), but Taylor (1965) recognized it as a subspecies of *Oligodon cinereus*. This latter species is now regarded as monotypic (Wagner, 1975). Our up-to-date list contains 12 species (see below).

(14) - Genus *Liopeltis*. The genus *Liopeltis* Fitzinger, 1843 was split by Leviton (1964), who referred to the genus *Gongylosoma* Fitzinger, 1843 the nominal species *Coronella baliodeira* Boie, 1827, *Ablabes longicaudus* Peters, 1871 and *Ablabes scriptus* Theobald, 1868 (see also David and Vogel, 1996: 93). We accept this interpretation; as a consequence, *Liopeltis baliodeira* (Boie, 1827) and *Liopeltis scriptus* (Theobald, 1868) should be renamed *Gongylosoma baliodeira* (Boie, 1827) and *Gongylosoma scriptum* (Theobald, 1868), respectively.

(15) - This specific nomen *baliodeira* is not an adjective, but a noun in apposition meaning “spotted neck”. As a consequence, it should not be accorded with the gender of the generic nomen.

(16) - Genus *Calamaria*. The taxonomy presented by WN is out of date. Unless WN has found evidence to recognize *Calamaria leucocephala* Duméril, Bibron and Duméril, 1854 as a valid species, it has been regarded as

a synonym of *Calamaria schlegeli* Duméril, Bibron and Duméril, 1854 since Inger and Marx (1965: 154). Both *Calamaria uniformis* Smith, 1921 and *Calamaria siamensis* Günther, 1864 were placed in the synonymy of *Calamaria pavimentata* Duméril, Bibron and Duméril, 1854 by Inger and Marx (1965: 213). In addition, *Calamaria lumbricoidea* Boie in Boie, 1827, present in South Thailand (Inger and Marx, 1965), was overlooked by WN.

(17) - Only two species are listed by WN under the genus *Ahaetulla*, whereas four species are known from Thailand (see in Appendix).

(18) - The suprageneric classification of front-fanged snakes used by WN is somewhat outdated. The Laticaudinae are usually placed in the Elapidae. *Aipysurus* belongs to the Hydrophiidae, not to the Laticaudinae.

WN lists only *Laticauda colubrina*, whereas *Laticauda laticaudata* also occurs in Thai waters.

(19) - *Calliophis malcolmi*. WN presents this taxon as a nomen novum, although the given date is 1914. This taxon was named by Taylor (1965: 978) as a replacement name for *Callophis maculiceps univirgatus* Smith, 1915 (nec *Elaps univirgatus* Günther, 1859, now *Sinomicrurus maccllellandi univirgatus* (Günther, 1859)). However, Taylor was not aware that the same nomen had been replaced by Klemmer (1963) as *Calliophis maculiceps smithi*.

(20) - The species *Trimeresurus hageni* (Van Lidth de Jeude, 1886), restricted to the southern part of the country, and *Trimeresurus macrops* Kramer, 1977, wide-ranging in central and northern Thailand, are missing.

(21) - WN co-authored a paper (Nutphand et al., 1991a) in which *Trimeresurus wiroti* was synonymized with *Trimeresurus puniceus*. Yet he persists in using, knowingly in this case, incorrect taxonomy.

### *A detailed analysis of accounts*

We provide comments and corrections of data provided in all accounts. We must emphasize the fact that we did not intend to discuss the distributions provided by WN in

depth. Firstly, the scale of the maps does not allow anyone to ascertain the exact range which WN had in mind. Secondly, his long experience in the field most likely allowed him to find specimens in areas of which we are not aware, and which may have greatly extended the currently known range of some species. A striking example is given by the presence in Thailand of *Xenochrophis punctulatus* (see below).

We also comment on many of the common names given by WN. We do not advocate the creation of artificial common names, although they can be significant and useful for medically important species. However, we feel that this problem must be addressed, because WN gives an English name for every taxon. However, in most cases, the so-called common names seem to have been pulled out of the air. Most are absolutely not common at all, not even close to being descriptive, and often misleading. We try to give the names appearing most frequently in the literature.

One of the greatest issues of this book, which has bearing on nomenclature, is the problem of the so many misspellings plaguing generic and specific names. Some of them depart so much from their original spelling that they might be regarded as new names, for example the combination *Senelapsis sexagonotus*. The presence of the author and date of description makes clear that this scientific name is a mixture of lapsus for *Xenelaphis hexagonotus*. Considering the general overwhelming lack of care put in the writing of scientific names throughout the book, and on the basis of Dubois (1987: 35), who provided a list of criteria that can be used to determine whether a change of spelling introduced by an author was intentional or not, we will regard all such cases (but one, *Ptyas zoazys*, see below) as incorrect subsequent spellings. These names have no status in nomenclature, to the contrary of "new replacement names" (neonyms, sensu Dubois, 2000), which indeed have a status in nomenclature. Regarding all WN's new names as neonyms would greatly increase confusion in

synonymies, since such names would preoccupy these spellings for the whole of Zoology.

Page 52: *Typhlops khoratensis* Taylor, 1962

The drawing does not adequately portray the scalation of the head of this species. According to Van Wallach (pers. comm.), this species has a supralabial imbrication pattern of Type T-III, meaning the third supralabial overlaps posterodorsally the shield above and behind it. This very poor drawing does not show any supralabials and is worthless. According to WN, this species is present throughout Thailand. Our data suggest that it is only confirmed in the provinces of Chiang Mai, Nakhon Ratchasima and Saraburi. We doubt the presence of this species in South Thailand. Furthermore, this typhlopoid can be met on the ground day or night after heavy rains (Cox, unpublished data).

Pages 60-63: *Python reticulatus* (Schneider, 1801)

The series of seven photographs depict interesting morphs of coloration, but these color variations are given proper names, such as Calico reticulate, which may be regarded by an inexperienced reader as distinct species or subspecies.

Pages 64-67: *Python molurus bivittatus* Schlegel, 1837

The author and date are erroneous; this taxon should appear as *Python molurus bivittatus* Kuhl, 1820. The range map is erroneous, as this taxon is known from western and northern Thailand north of Chumphon Province. The photographs on pages 66-67 show unusual morphs of coloration, but the photograph at the bottom of page 67 shows several *Python brongersmai* hatching. The given English name, Bivittatus Python, is really odd! This snake is usually known as the Burmese Python.

Pages 68-69: *Python curtus brongersmai* Sluhl, 1881

Corrected name and authorship: *Python curtus brongersmai* Stull, 1938, now *Python*



*brongersmai*. We follow Shine et al. (1999) who raised this taxon to full species status. *Python curtus* Schlegel, 1872 is restricted to Western Sumatra, Indonesia.

This snake is usually known as the Short-tailed Python.

Pages 70-71: *Python curtus*

WN dedicates a separate account to what is just the black morph of *Python brongersmai*, merely noted by him as *Python curtus*, but with a different English name, “Black short Python”.

Page 72: *Parea laevis* (Boie), 1827

The generic name is misspelled: *Pareas laevis* (Boie, 1827). This species should now be known as *Asthenodipsas laevis* (Boie, 1827) (Ota, 1999). Our records indicate this species has only been recorded in the South in Nakhon Si Thammarat Province. The distribution map, making this species present throughout Thailand, is definitely wrong. The English name usually appears as the Smooth slug snake. On the basis of morphological differences, Rao and Yang (1992) split the genus *Pareas* Wagler, 1830 into two genera, referring the taxa *laevis* Boie, 1827, *malaccanus* Peters, 1864 and a few others to their new genus *Internatus*. Ota (1999) pointed out the priority of *Asthenodipsas* Peters, 1864 over *Internatus*, a position followed by Iskandar and Colijn (2001).

Page 74: *Parea macularius* Theobald, 1868

The generic name is misspelled (*Pareas*). The depicted snake seems to be a *Pareas margaritophorus*. The map provided for *P. macularius* is correct, since this species has recently been discovered in South Thailand (Chanhome et al., 2001).

Page 75: *Parea malac canus* (Peters), 1864

The generic and specific names are misspelled: *Pareas malaccanus* (Peters, 1864), a species which should now be known as *Asthenodipsas malaccana* Peters, 1864 (see Ota [1999]). For this species, WN does not provide any map.

Page 76: *Parea margaritophorus* (Jan), 1866

The generic and specific names are misspelled and the authorship is incomplete: *Pareas margaritophorus* (Jan in Bocourt, 1866). The specimen shown on p. 76 is most likely a *Pareas malaccanus*. *Pareas margaritophorus* is shown on p. 77.

Page 78-79: *Aplopeltura boa* (Boie), 1828

The common name given by WN has never been met by us. This snake is usually known as the Blunt-headed slug snake.

Page 80-81: *Sibynophis melanocephalus* (Gray), 1834

The date of description is erroneous. This species was described on Plate 83 of Gray (1832-1835), which was published in 1835 (see David and Ineich, 1999: 414). The photographs of the head at the bottom of page 80 are useless.

Pages 82-83: *Sibynophis triangularis* Taylor and Elbel, 1958

The specific nomen *triangularis* should not be spelled with a capital “t.” *Sibynophis triangularis* was synonymized with *Sibynophis collaris* by Morgan (1973). The map is erroneous. *Sibynophis collaris* has been recorded from central and eastern Thailand (Taylor and Elbel, 1958; Taylor, 1965; Cox, 1991). Furthermore, the specimen shown on p. 83 seems indeed to be a *Ptyas korros*. The common name given by WN, Redbrown Grasswater snake, is not common at all. *Sibynophis triangularis* is usually known as the Triangle many-tooth snake.

Pages 84-85: *Acrochordus javanicus* Hornstedt, 1787

The map is definitely wrong: this species is known only from the central, southern and southeastern regions.

Pages 86-87: *Acrochordus granulatus* Schneider, 1799

The author and date of this taxon described as *Hydrus granulatus* should be placed within

brackets. No map is provided. Photographs of the head shown on page 86 are totally useless. We never met the given common name, Pin-tailed sea snake.

Pages 88-89: *Gonyosoma floweri* (Werner), 1943

See Note 9 above for a discussion of the taxonomy of *Gonyosoma floweri* and *Gonyosoma janseni* sensu Nutphand. The date given for *Gonyosoma floweri* is erroneous. It should read as *Gonyosoma floweri* (Werner, 1925). Furthermore, although WN did not include a bibliography in his book, it is clear that he followed Taylor (1965) in recognizing *Gonyosoma floweri* as valid. Smith (1943) synonymized this nominal species with *Gonyosoma oxycephalum*, an interpretation followed by Schulz (1996) and by other authors, except Taylor (1965). In any case, the map provided for *Gonyosoma floweri* is erroneous, as the gray or brown morphs of *G. oxycephalum* have been found mostly in South Thailand. Lastly, the specimen depicted on p. 88 is definitely not a *Gonyosoma*, but perhaps a *Boiga cyanea*, whereas the snake shown on p. 89 appears to be a brown *Gonyosoma oxycephalum*. The ink drawing, supposed to depict *Gonyosoma floweri*, is largely erroneous. The nominal genus *Gonyosoma* has been regarded as a synonym of the genus *Elaphe* by Schulz (1996), but is considered to be valid by most other authors.

Pages 90-91: *Gonyosoma oxycephalum* (Boie in Boie), 1890

The authorship and date are erroneous. It should read: *Gonyosoma oxycephalum* (Boie, 1827).

Pages 92-93: *Gonyosoma prasina* (Blyth), 1854

The map is wrong. This species has been found in the North as well as the northern part of Isan. This species is usually placed in the genus *Elaphe*, even by authors recognizing the genus *Gonyosoma* as valid. Its position was not investigated by Utiger et al. (2002), but they

suggested a close relationship with *Gonyosoma* (as *Gonyosoma prasinum*).

Pages 94-95: *Elaphe taeniura* (Cope), 1864

Utiger et al. (2002) placed this species in their new genus *Orthriophis*. The date should read as (Cope, 1861). Specimens depicted on pages 94-95 should be referred to *Orthriophis taeniurus* ssp., an unnamed taxon mentioned by Schulz (1996: 264). In the biology, the pictogram on the biotope is partly erroneous, as this species is as arboreal as terrestrial. The head drawings can hardly be thought of depicting an *Orthriophis taeniurus*, or even any other known snake species.

Pages 96-97: *Elaphe taeniura ridleyi* (Butler), 1627

The date is obviously erroneous. It should read as (Butler, 1899). Here also the biotope is partly erroneous, this subspecies being as arboreal as terrestrial. The range map is erroneous, as the subspecies *ridleyi* is known from Peninsular Thailand. It should now be known as *Orthriophis taeniurus ridleyi*.

Pages 98-99: *Elaphe radiata* (Schlegel), 1890

Helpfenberger (2001) and Utiger et al. (2002) referred this species to the genus *Coelognathus* Fitzinger, 1843. The authorship and date are erroneous, and should read as *Elaphe radiata* (Boie, 1827). This snake is widely known as the Copperhead rat snake.

Page 100: *Elaphe porphyracea* (Cantor), 1839

Utiger et al. (2002) placed this species in their new genus *Oreophis*. The depicted specimen seems to be an *Oreophis porphyraceus porphyraceus* (Cantor, 1839). To the contrary, the ink drawings do not depict any known snake, and should be regarded as purely imaginary. The range of this species in Thailand is imperfectly known, but the map given by WN seems to be erroneous. This species has been recorded from the hilly and montane areas from North, West and South Thailand.

Pages 102-103: *Elaphe flavolineata* (Schlegel), 1837

Helfenberger (2001) and Utiger et al. (2002) referred this species to the genus *Coelognathus* Fitzinger, 1843. This snake is generally known as the Yellow-striped rat snake.

Pages 104-105: *Ptyas korros* (Schlegel), 1837

This species is as widely known in the literature as the Indochinese rat snake.

Pages 106-107: *Ptyas mucosus* (Linnaeus), 1758

The generic nomen *Ptyas* is feminine (see David and Das, 2004), so this taxon should appear as *Ptyas mucosa*. We have never seen the common name “Banded rat snake”. This snake is widely known as the Common rat snake, or Oriental rat snake.

Page 108-109: *Ptyas carinatus* (Günther), 1864

This snake is sometimes included in genus *Zaocys*, but there is considerable disagreement on the validity of the genus *Zaocys* Cope, 1861; we refer to the discussion provided in David and Das (2004). The current taxonomy is in favour of a synonymy of these two genera, but future studies may prove that the genus *Zaocys* Cope, 1861 is a valid taxon (V. Wallach, pers. comm. to PD, June 2001). This taxon should appear as *Ptyas carinata*. The drawing of the head side is erroneous in showing three suboculars; suboculars are totally absent in this species. This snake is commonly known as the Keeled rat snake, not the Black rat snake.

Pages 110-111: *Ptyas zoa zys*

This species is currently known as *Ptyas fusca* (Günther, 1858). It is a species quite rare in Thailand, restricted to the southernmost parts of the country. The northernmost locality of the species known to the present is near Phangnga, Phangnga Province (Pauwels et al., 2002b).

WN creates an interesting taxonomic and nomenclatural problem. To the contrary of most other taxa presented in the book, the scientific binomen of this taxon appears without any author. We, although arbitrarily, assume that WN intended to describe a new species. The

specific name, *zoa zys*, can hardly stand for a lapsus calami for the specific nomen *zaocys*. However, according to the *Code* (ICZN, 1999), WN creates an invalid specific epithet, which appears under the form of a nomen nudum, as (1) this nomen is written under an invalid spelling according to the *Code* (Art. 32.5.2.2), (2) the potential new nomen does not bear the indication of a new description (Art. 16.1), and neither diagnosis nor description is provided (Art. 13.1.1). We here correct it as *Ptyas zoazys* Nutphand, 2001, nomen nudum (p. 43, p. 110). Nevertheless, all photographs provided by WN clearly depict *Ptyas fusca* (Günther, 1858). As a consequence, *Ptyas zoazys* Nutphand, 2001 is regarded as a subjective junior synonym of *Ptyas fusca*. Nomina nuda are not available names, and therefore a same name may be made available later for the same or a different concept (ICZN, 1999: 111). This species is known in West Malaysia as the Whitebelly rat snake.

Pages 112: *Senelapsis sexagonotus* (Günther), 1864

The nomina *Senelapsis* and *sexagonotus* stand as incorrect subsequent spellings for the generic nomen *Xenelaphis* Günther, 1864 and *hexagonotus* Günther, 1864, respectively. The common name given by WN, “False rat snake”, is unusual. This snake is better known as the Malayan brown snake.

Pages 114-115: *Lycodon subcinctus* (Boie), 1827

The specific nomen should be spelled *subcinctus* (incorrect subsequent spelling) Furthermore, the identification is erroneous, as the depicted snakes are *Lycodon effraenis* Cantor, 1847. The usual common name of *Lycodon subcinctus* is the Malayan banded wolf snake.

Pages 118-119: *Lycodon fasciatus* (Boie), 1827

In the checklist, page 43, WN lists two kinds of *Lycodon fasciatus*, with two different Thai names, “Black and white Wolf Snake” and “Black long Wolf Snake”, respectively. On p.

118 appears the morph identified as Black & White Wolf Snake. We doubt that the identifications of the depicted specimens are correct; they seem to be *L. subcinctus*.

*Lycodon fasciatus* is usually known as the Banded wolf snake.

Pages 120-121: *Lycodon fasciatus*

The depicted specimens are obviously different from those shown on pp. 118-119. WN recognized the specimens of pp. 120-121 as the Black long Wolf Snake. We are in presence of a misidentification, as these specimens are obviously *Lepturophis albofuscus*. The confusion made by WN between this latter taxon and *Lycodon fasciatus* may explain the absence of *Lepturophis albofuscus* in the checklist.

Pages 122-123: *Lycodon capuncinus* (Boie), 1827

The specific nomen should be spelled *capucinus* (incorrect subsequent spelling). Furthermore, the specimen shown on p. 122 is not a *L. capucinus*, but belongs to *Dryocalamus davisonii* (Blanford, 1878), whereas the photograph on p. 123 shows a *Lycodon subcinctus*. The usual common name for *Lycodon capucinus* is the Common wolf snake or the Asian house snake.

Pages 124-125: *Dinodon septentrionalis* (Günther), 1875

According to Toriba and Hikida (1999), the generic nomen *Dinodon* is neutral, not masculine as once broadly believed.

We believe that WN has never seen *Dinodon septentrionale*. The depicted specimens are true *Lycodon capucinus*. Furthermore, *Dinodon septentrionale* is confined to northern Thailand, and in no way occurs throughout the country, as suggested by the map. To the contrary, *Lycodon capucinus* is largely present throughout Thailand. This species is sometimes known as the Hill wolf snake. It shows a striking similarity in pattern and coloration to the highly venomous *Bungarus multicinctus* (see below in Conclusion).

Pages 126- 137: Genus *Oligodon*

Taxonomical confusion in the genus *Oligodon* is extreme, and the misidentifications in WN's book can only increase it. We would suggest that Thai students undertake a serious taxonomic revision of this difficult genus in Thailand. We did our best below to correct WN's misidentifications but it is difficult to determine *Oligodon* species from photographs, and our determinations cannot be taken as definitive.

Pages 126-127: *Oligodon jognsoni* M. Smith, 1917

The specific nomen should be spelled *joynsoni* Smith, 1917. All depicted specimens are not *O. joynsoni*, but seem to be *Oligodon fasciolatus* (Günther, 1864) (see below under the account of *O. purpurascens* for the confusion of this latter species with *O. fasciolatus*). *O. joynsoni* is a rare species (although WN did not indicate it as such), with 17 dorsal scale rows at midbody, and with a typical dorsal pattern made of about 50 black crossbars, every one enlarged into a more vivid elongated blotch (Taylor, 1965: 782). A drawing of its dorsal pattern may be found in Smith (1943: 218). The specimen(s) depicted on p. 126 and at top of p. 127 have 21 rows, which exclude their identification as *Oligodon cinereus*, a species present in Thailand which also has 17 rows. Furthermore, the map provided by WN is erroneous. According to our records this northern species has not been recorded south of Uthai Thani Province. This species is known as the Gray kukri-snake; the common name given by WN, House kukri snake, is quite inappropriate for this rather uncommon species.

Pages 128-129: *Oligodon taeniurus* Günther, 1894

The specific nomen, authorship and date are erroneous; this species should appear as *Oligodon taeniatus* Günther, 1861. We have never seen the specific nomen *Oligodon taeniurus*. As a consequence, *Oligodon taeniurus* Nutphand, 2001 is a nomen nudum.

Furthermore, the specimens depicted on these pages are definitely not *O. taeniatus*, which has a distinct striped pattern. Specimens on pp. 128 and 129 (top) seem to be *Oligodon barroni* Smith, 1916 (with 17 dorsal rows), whereas the snake at the bottom of p. 129 seems to be an *Oligodon fasciolatus*. *O. taeniatus* is usually known as the Striped kukri snake.

Pages 130-131: *Oligodon purpurascens* (Schlegel), 1837

Another case of misspelling: the specific nomen should appear as *purpurascens*. This species is a Malayan taxon, known in Thailand only from the southernmost provinces. The provided map is hence totally erroneous, as is the identification of the depicted specimens. All are definitely not *Oligodon purpurascens*, but typical *Oligodon fasciolatus* (Günther, 1864). We follow Wagner (1975) in regarding *Oligodon fasciolatus* (Günther, 1864) as the correct binomen for Thai populations with 21 or 23 scale rows at midbody. Such snakes have been widely identified in the literature as *Oligodon cyclurus smithi* (Werner, 1925) and *O. cyclurus superfluens* Taylor, 1965, which hence become junior synonyms of *O. fasciolatus*. More information on this synonymy appeared in Pauwels et al. (2002c, 2003). This species is known from eastern Myanmar, Thailand, Cambodia, Laos and Vietnam, whereas *Oligodon cyclurus* (Cantor, 1839) is restricted to India, Bangladesh, and western, central and northern Myanmar. A key to the *Oligodon* species of Thailand can be found in Pauwels et al. (2002c). *Oligodon purpurascens* is better known as the Brown kukri snake.

Pages 132-133: *Oligodon quadrilineatus* (Jan), 1865

This is another very confusing account. Firstly, *Oligodon quadrilineatus* Jan, 1866 (not 1865) is a junior synonym of *Oligodon taeniatus* (Günther, 1861), as shown by Campden-Main (1969). Secondly, this species is characterized by longitudinal dorsal stripes, totally different from the depicted specimens. They seem to be another morph of *Oligodon fasciolatus*, but close-up pictures are generally

useless to determine the number of dorsal scale rows. The common name given by WN is at best meaningless.

Pages 134-135: *Oligodon dorsolateralis* (Wall), 1914

The specific nomen is misspelled and the date is erroneous; this species should appear as *Oligodon dorsolateralis* (Wall, 1910). This nominal taxon, known from India, Myanmar and northwestern Thailand, was synonymized with *Oligodon cyclurus* (Cantor, 1839) by Smith (1943), but Taylor (1965) regarded it as valid for a specimen collected in Chiang Mai. Wagner (1975) eventually regarded this taxon as a synonym of *Oligodon cyclurus*, a position that we follow here. In any event, specimens depicted on pp. 134-135 are actually *Oligodon taeniatus* (Günther, 1861). The range map is quite erroneous, as this species is not known from South Thailand.

Pages 136-137: *Oligodon inornatus* (Boulenger), 1914

The specific nomen is misspelled; it should be *inornatus*. *Oligodon inornatus* (Boulenger, 1914) is a rare species typically with 15 scale rows at midbody and virtually patternless. The specimens depicted here appear to belong to the white barred color pattern of *Oligodon cinereus* sensu Wagner (1975). The map given for *Oligodon inornatus* is erroneous: this species is known only from the north and southeast of the country, definitely not from Peninsular Thailand (Cox, 1991). The common name given to *Oligodon inornatus* is the Inornate kukri snake.

Pages 138-139: *Liopeltis tricolor* (Schlegel), 1832

The date of description should appear as 1837. The range map is erroneous, as this species is known only from South Thailand, unless WN has evidence to extend the range to most of the country. We have never seen the common name given by WN, “White-ribbed Brown Snake”. This species is usually known as the Malayan ringneck snake.

Pages 140-141: *Dryocalamus davisonii* (Blanford), 1878

The photograph does not seem to show *Dryocalamus davisonii* (Blanford, 1878). The depicted specimen appears to be the banded form of *Dryocalamus subannulatus* rather than *Dryocalamus davisonii*. This latter species is found throughout the Kingdom except the extreme south. The common name Hut Wolf Snake, is unknown to us.

Pages 142-143: *Dryocalamus subannulatus*

The authorship is missing; this taxon should appear as *Dryocalamus subannulatus* (Duméril, Bibron and Duméril, 1854). This species is indicated as being terrestrial, however, it is largely arboreal (Cox, 1991). The same applies to *Dryocalamus davisonii* (pp. 140-141).

Pages 144-145: *Dendrelaphis caudolineatus* (Gray), 1834

The head drawings are pure imagination.

Pages 146-147: *Dendrelaphis cyanochlows* (Wall), 1921

The specific nomen is misspelled. It should be *Dendrelaphis cyanochloris* (Wall, 1921). The map is erroneous. This species is mostly known from the northern provinces of the country and as far south as Phuket Island. Lastly, the English name, "Green brown snake", is meaningless. This species is better known as the Wall's bronzeback.

Pages 148-149: *Dendrelaphis fimosus* (Boie), 1827

The specific nomen is misspelled: *Dendrelaphis formosus* (Boie, 1827).

Pages 150-151: *Dendrelaphis subocularis* (Boulenger), 1888

This is yet another misidentification; depicted specimens are *Dendrelaphis pictus* (in which two supralabials enter the orbit). WN's drawing at the bottom of p. 150 does not depict *Dendrelaphis subocularis*, characterized by the contact of only one supralabial with the eye.

Pages 152-153: *Xenochrophis piscator* (Schneider), 1799

The taxonomy of the group of *Xenochrophis piscator*, and especially the validity of *Xenochrophis flavipunctatus* (Hallowell, 1861), are controversial. Our own data are in support of Taylor's (1965) and Kramer's (1977) interpretations who separated *X. flavipunctatus* from *X. piscator* on the basis of constant differences in the patterns of the back, head and belly. This preliminary approach to the problem has been discussed elsewhere (Chanhome et al., 2001; Pauwels et al., 2003). In Thailand, both taxa are known, but *Xenochrophis piscator* is only known from the north and northwest of the country. Specimens depicted on pp. 152-153 are referable to *Xenochrophis flavipunctatus*, widespread throughout the country, although more rare in the forested parts of the south. The common name, Keelback, applies to several genera of the natricine snakes. The present species is usually known as the Checkered keelback.

Pages 154-155: *Sinonatrix percarinata*

The author and date are missing: *Sinonatrix percarinata* (Boulenger, 1899). The populations of Taiwan being assigned to a distinct subspecies, *Sinonatrix percarinata suriki* (Maki, 1931) (see Zhao et al., 1998), populations of Thailand belong to the nominative subspecies. The drawings of the head are largely erroneous, and should not be used, as they definitely do not depict a *Sinonatrix*. Internasals are not fused in this species, and the representation of the scales in front of the eye is purely imaginary. The map is wrong, as, in Thailand, *S. percarinata* is known only from the northern part of the country.

Pages 156-157: *Amphiesma inas* (Laedlaw), 1901

The author's name is erroneous, and should read as Laidlaw. This account is quite interesting in that, if it definitely depicts an *Amphiesma inas*, a Malayan species rather rare in Thailand (see David and Pauwels, 2000; Chanhome et al., 2001), the map does not agree

with the known range of the species. In Thailand, *Amphiesma inas* is currently known only from the extreme south of the country. We cannot ascertain whether WN collected specimens in the western part of Thailand, as shown on the map, or whether this latter one is just erroneous. In any event, WN's map does not show the known range of *Amphiesma inas* in southern Thailand. This species is known as the Malayan mountain keelback.

Pages 158-159: *Amphiesma groundwateri* (Smith), 1892

Firstly, it should be noted that the cited date of description is wrong; *A. groundwateri* was described in 1922.

Secondly, the greatest problem is the identification of the species: the depicted snake is not *Amphiesma groundwateri*, but *Xenochrophis punctulatus* (Günther, 1858). This species, previously known only from Myanmar, has been illustrated for the first time (albeit accidentally) in this book. WN is a coauthor of a paper (Pauwels et al. 2002a) presenting the first record of *Xenochrophis punctulatus* from Thailand on the basis of the specimen shown in this account. This same specimen was in WN's private collection and is now deposited in the collections of the *Institut Royal des Sciences Naturelles de Belgique* (IRSNB; Brussels). Pauwels et al. (2002a) was in press long before we could examine Nutphand's book, and could not be modified. It is difficult to understand how such a mistake was made. Although Pauwels et al. (2002a) was the first to clearly cite *Xenochrophis punctulatus* from Thailand, it should be noted that the first picture of a living specimen appeared in WN's book. This species is currently known only from Mae Hong Son Province, western Thailand. The true *Amphiesma groundwateri* is known as the Groundwater's keelback.

Pages 160-161: *Opisthotropis spenceri* Smith, 1918

Another misidentification: the depicted specimen, with a dull pattern, poorly defined

streaks below eyes and no transverse stripes on ventral scales, is a typical *Xenochrophis piscator* (Schneider, 1799), as the authors of the present paper currently understand the taxonomy of the genus *Xenochrophis*. It should be compared with pictures of *X. flavipunctatus* appearing on pages 152-153. The map is wrong both for *Opisthotropis spenceri*, known only from Lampang Province, in North Thailand, and for *Xenochrophis piscator*, known in some provinces of central and northwestern Thailand. *Opisthotropis spenceri*, like other species of the genus, has a typically divided head scalation, and can hardly be confused with a *Xenochrophis*.

Pages 162-163: *Macropisthodan flaviceps* (Dumeril, Bibron and Dumeril), 1854

See below remarks under *Macropisthodon rhodomelas*.

Pages 164-165: *Macropisthodan rhodomelas* (Boie), 1827

The generic nomen is misspelled and should be corrected to *Macropisthodon*. Both taxa are correctly identified. A map is missing for *M. flaviceps*. This species is known from extreme southern Thailand. The common name given to *Macropisthodon rhodomelas*, Arrow pink keelback, is rather unusual. This species is usually known as the Blueneck keelback.

Pages 166-167: *Rhabdophis subminiatus helleri* K. Schmidt, 1925

This taxon was described as *Natrix helleri* Schmidt, 1925, and hence should be cited as *R. subminiatus helleri* (Schmidt, 1925). The map is by all evidence erroneous, as this taxon is known only from northern Thailand. The depicted specimens seem to be typical *R. subminiatus subminiatus*.

Pages 168-169: *Rhabdophis nigrocinctus* (Blyth), 1856

The map is erroneous, as this taxon is known from all Thai regions.

Pages 170-171: *Rhabdophis stolatus* (Linnaeus), 1758

Although once placed in the genus *Rhabdophis* (see Taylor, 1965), this species is now unanimously placed in the genus *Amphiesma*, of which it is the type species (see David et al., 1999). The map provided by WN is erroneous: this species is found in all provinces north of Bangkok. The head drawings are useless, if not purely imaginary. This widespread species is widely known as the Buff-striped keelback.

Pages 172-173: *Rhabdophis trianguliger* Boie, 1827

This is a rather puzzling taxonomic treatment of *Xenochrophis trianguligerus* (Boie, 1827), a typical natricine long placed in the genus *Natrix* and now referred to as *Xenochrophis trianguligerus* (Boie, 1827) (see Malnate and Underwood, 1988). To our best knowledge, we have never seen either the specific epithet *trianguliger* nor the combination *Rhabdophis trianguligerus*. The map is correct for *X. trianguligerus*. This species is usually known as the Triangle keelback.

Pages 174-175: *Rhabdophis chrysargus* (Boie), 1827

This is yet another case of poor taxonomy and misidentification that is hard to understand. Firstly, the correct specific epithet is *chrysargos*, not *chrysargus* (see David and Vogel, 1996: 128), and the author is Schlegel (1837), not Boie (1827). Secondly, if the specimens shown on tops of pages 174 and 175 are indeed *Rhabdophis chrysargos*, the animal shown on the bottom of p. 175 is an *Amphiesma inas*, an unrelated taxon. This, of course, leaves the authenticity of WN's map in question. This species is usually known as the Speckle-bellied keelback.

Pages 180-181: *Boiga mahasomi* Nutphand, 1983

WN, both in the checklist (p. 45) and in the species account, states that this species was described in 1983. In fact, this is incorrect, as,

to our best knowledge, *Boiga mahasomi* was described in Nutphand (1986a). In an earlier publication, Nutphand (1985) described *Boiga saengsomi*, obviously based on the same specimens used to describe *Boiga mahasomi*. By all evidence, this latter binomen is a replacement name for *Boiga saengsomi*, which has priority. The reason for the author renaming this species is unclear. In both cases, the specific epithet is based on the name of the collector of the types, Mr. Buntot Saengmahasom (see Nutphand et al., 1991b). Our literature survey revealed that the specific nomen *saengsomi* has appeared several times since 1985, but the binomen *Boiga mahasomi* has never been used.

Pages 182-183: *Boiga multomaculata* (Boie), 1827

The common name given by WN, Pigmy brown cat-eyed snake, is unknown to us. This species is rather known as the Marble cat snake.

Pages 186-187: *Boiga ocellata* Kroon, 1973

The map is erroneous, as *B. ocellata* is a northern species not known from the southern part of Peninsular Thailand; its current southernmost locality is in Chumpon Province (Cox, 1991).

Pages 190-191: *Boiga cynodan* (Boie), 1827

This specific epithet is misspelled, and should appear as *cynodon*. This species is usually known as the Dog-tooth cat snake.

Page 192: *Boiga cyanea* (Dumeril, Bibron and Dumeril), 1854

The head drawings, both poor and imaginary, are totally useless.

Page 193: *Ahaetulla prasina* (Boie), 1827

WN extensively confused this species with *Ahaetulla nasuta*. The ink drawings scarcely bear even a remote similarity to *Ahaetulla prasina*, and are useless. The range map, restricting this species to southern Peninsular Thailand, is obviously erroneous (Taylor, 1965;



Cox, 1991). It is strange that WN dedicated only a single page to this very common and widespread species. Lastly, this species is widely known as the Oriental whip snake.

Pages 194-199: *Ahaetulla nasuta* (Lacepede), 1789

WN demonstrates that he has little knowledge on the genus *Ahaetulla* on these pages. The map shown on p. 194 is wrong; *Ahaetulla nasuta* is not found throughout Peninsular Thailand, its southernmost extent is Prachuap Khiri Khan Province (Pauwels, unpublished). Further confusion is evident in the depicted specimens. If photographs on pp. 194-195 indeed show specimens of *Ahaetulla nasuta*, those on p. 196 (“Gray Jungle Whip Snake”) depict gray specimens of *Ahaetulla prasina*, just one of the many color phases of the latter. The pictures on p. 197 (“Spotted Jungle Whip Snake”) are interesting in that they depict a specimen of *Ahaetulla fasciolata* (Fischer, 1885), a Malayan species occasionally found in South Thailand. Again, specimens shown on pp. 198-199 (“Yellow Whip Snake”) are other color variants of *A. prasina*.

Pages 200-201: *Dryophiops rubescens* (Gray), 1827

The date of description is erroneous and should be corrected to 1834. Contrary to what is indicated in a pictogram, this species is strongly arboreal.

Pages 202-203: *Psammodynastes pulverulentus* (Boie), 1827

This widespread species is usually known as the Mock viper. The map is erroneous, as this species is indeed known from Central Thailand. It was cited from Lopburi Province by Thumwipat and Nutphand (1982: 115).

Pages 204-205: *Chrysopelea ornata* (Shaw), 1802

This common species is usually known as the Flying snake.

Pages 206-207: *Chrysopelea paradisi* Boie, 1827

This species is usually known as the Paradise tree snake rather than the Flying tree snake.

Pages 210-211: *Psammophis condanarus* (Merrem), 1820

As explained in Pauwels et al. (2003), we follow Hughes (1999) in regarding *Psammophis condanarus indochinensis* as a full species, because *P. indochinensis* shows substantial differences in microdermatoglyphic patterns which warrant distinct specific status.

The head drawings show an imaginary scalation. The map is largely erroneous, as *Psammophis indochinensis* is known from Central and North Thailand (Taylor, 1965; Cox, 1991). The common name given by WN (Stripe bronze snake) is misleading. This species is rather known as the Indochinese sand snake.

Pages 214-215: *Enhydris plumbea* (Boie), 1827

The drawings of the head scalation are totally erroneous. This common species is widely known as the Plumbeous water snake.

Pages 216-217: *Enhydris smithi* (Boulenger), 1914

This taxon was considered to be conspecific with *Enhydris innominata* (Morice, 1875), with a subspecific status, by Saint Girons (1972). This position was followed by Murphy and Voris (1994). The map is erroneous, as this snake has also been recorded from Bangkok and Samut Prakan provinces by Thumwipat and Nutphand (1982). Again, WN contradicts his own previous work.

Pages 218-219: *Enhydris jagorii* (Peters), 1863

This snake is more commonly known as the Striped water snake.

Pages 220-221: *Enhydris bocourti* (Jan), 1865

This species is rather known as the Bocourt's water snake.

Pages 224-225: *Cerberus rynchops* (Schneider), 1799

This common species is widely known as the Dog-faced water snake. We have never seen nor heard of the very unusual name given by WN, "Brackled water snake".

Pages 226-229: *Erpeton tentaculatum* Lacepede, 1801

The date of description is incorrect. Lacepede's paper appeared in 1800. In addition, on pp. 228-229, WN recognized the dark morph of this species as a "variety". It is not named, and this unsubstantiated taxonomic indication has no value. This species is widely known as the Tentacled snake.

Pages 234-235: *Bungarus candidus* (Linnaeus), 1758

This species is widely known as the Malayan krait.

Pages 236-249

This informal section covers the genus *Naja*. It is one of the most critical parts of this book and contains an incredible mixture of misidentifications, fanciful taxonomy, nomenclatural shortcomings, and erroneous maps. Readers should be very cautious in using Nutphand's book to determine members of this dangerously venomous group.

Pages 236-238: *Naja naja kaouthia* Lesson, 1831

The nominal taxon *kaouthia* has been regarded as a valid species, *Naja kaouthia*, by Wüster and Thorpe (1989, 1991, 1992a, 1992b) and by Wüster (1992, 1996) and most subsequent authors. WN either overlooked recent literature, or, for some unspecified reason, did not follow it. The biology is partly erroneous too, because this species is often encountered during the day. The pictures on pp. 236-237 are indeed of *N. kaouthia* and two albino morphs of this species are depicted on p. 238. The upper one shows a specimen affected by leucism (white cobra). We have never encountered in the literature the common name

"Thai cobra", although it was once in very common use in the snake markets in southern China, Taiwan and Japan (H. Ota, pers. comm., July 2004). This species is otherwise known as the Monocellate cobra.

Page 239: *Naja kaouthia suphandensis* (Nutphand), 1989, New sp.

The title of this account could indeed be taken as a concise summary of this book. It is a careless writing compounded by a misunderstanding of taxinomial and nomenclatural rules. The subspecies cited three pages before (*Naja naja kaouthia* on p. 236) has been correctly elevated to a full species (*Naja kaouthia*) but it has no recognized subspecies. The subspecies WN suggests on p. 239 was described as *Naja kaouthia suphanensis* Nutphand (1986b). Thus, the subspecies name is misspelled, its author's name placed within brackets without justification, and the status of the suggested new species is immediately in question. This taxon was in fact described by Nutphand (1986b) as *Naja kaouthia suphanensis*. For reasons explained above, we regard *suphandensis* as a mistyping of *suphanensis*, and not as a new subspecific name, made available in his book, in spite of the mention indicating that it is a new species. The two depicted specimens are *Naja kaouthia*.

Pages 240-241: *Naja naja siamensis* Nutphand, 1980, New sp.

In this account the nomenclatural matter is more simple. *Naja naja siamensis* Nutphand, 1980 is a junior primary homonym of *Naja siamensis* Laurenti, 1768, and is hence invalid. *Naja siamensis* Laurenti, 1768, long confused with *Naja kaouthia*, was resurrected by Wüster and Thorpe (1994) and Wüster et al. (1995). In the present book, WN made a slight change from Thumwipat and Nutphand (1982), in which this taxon was then known as *Naja naja sputatrix* Boie, 1827, now *Naja sputatrix*, a species endemic to Indonesia. The depicted specimens indeed belong to *Naja siamensis*, but the range map is wrong; this species is found

throughout the Kingdom except the south. Good drawings, but the photos are useless.

Pages 242-243: *Naja naja sumatranus* Var.

Why WN recognizes *Naja naja sumatranus* as a subspecies and a variety is unclear to us. *Naja sumatrana* Müller, 1887, long confused in Thailand with *Naja kaouthia*, was raised to full species status by Wüster and Thorpe (1989) and is now largely recognized as such.

The depicted specimens belong to *N. sumatrana*, but both the head drawings, showing a snake without nostril, nasals and rostral, and the map (p. 242) are wrong. In Thailand, this species is only found in the south. The common name is the Equatorial spitting cobra. Pages 244-245: *Naja naja isanensis* (Nutphand), 1980, New sp.

Another interesting case. Whereas this taxon appears here with the indication “New sp.” (although it is shown as a subspecies), *Naja naja isanensis* was described by Nutphand in Thumwipat and Nutphand (1982). Later, it was regarded as a synonym of *Naja siamensis* by Wüster et al. (1997). The pictures do show *Naja siamensis*.

Pages 246-249: various pictures of *Naja* species.

On pp. 246 and 247 five pictures show eggs and hatchlings of what WN refers to as the Black and White Spitting Cobra (*Naja siamensis*). No further explanation is given; the relationship between the two photos of p. 247 is uncertain. On p. 248, the uppermost photo shows two unidentified cobras and mentions a date of shedding. The bottom photo shows an unidentified cobra whose age is six months and 13 days; no relationships are explained. On p. 249, the uppermost photograph is identified as the Isan Spitting Cobra in Thai. No scientific name is given, but, on the basis of Wüster et al. (1997), we identify this snake as *Naja siamensis*. The snake in the bottom photo is not identified in any language but we guess that WN wants us to assume it is the same snake.

Pages 250-251: *Ophiophagus hannah* (Cantor)

The date of description, 1836, should be added. The ink drawing of the head (p. 250) is quite erroneous in showing a loreal scale, absent in this species. It is a pity that WN did not clearly state that the uppermost photo on p. 251 is that of juvenile King Cobras, and the lowermost is that of an adult.

Pages 252-253: *Maticora bivirgata flaviceps* (Boie), 1827

The author and date of description are erroneous. The subspecies *flaviceps* was described (as *Elaps flaviceps*) by Cantor (1839). Furthermore, this taxon was placed in the genus *Calliophis* by Slowinski et al. (2001). The drawings on p. 252 are very inaccurate, without nostril, with temporals divided instead of being entire, and with the shape of the supralabials rather imaginary. Furthermore, it is a pity that both drawings and photographs are useless to separate this species from the very similar *Bungarus flaviceps* (see p. 232-233).

Pages 254: *Maticora intestinalis* (Laurenti), 1768

This species was placed in the genus *Calliophis* by Slowinski et al. (2001). In Thailand, the subspecies present is currently known as *Calliophis intestinalis lineatus* (Gray, 1835). Nothing indicating its biology, activity, or range is shown. This subspecies, usually known as the Banded Malaysian coral snake, occurs only in South Thailand, where it lives under rocks and vegetation in forested areas up to elevations of 1100 m (Cox, 1991).

Page 255: *Calliophis maccllellandi* (Reinhardt), 1844

We doubt the identification of depicted specimens, although we must confess that we are unable to propose anything. This snake just does not look like *Sinomicrurus maccllellandi* as currently understood (Slowinski et al., 2001). Pictures of the head provided by WN are useless. Nothing indicating periods of activity or range are shown. This terrestrial species is known from forested hills (up to 1800 m) in the

North and the Northeast of Thailand, where it lives under loose soil and fallen vegetation (Cox, 1991).

Pages 256-257: *Calliophis maculiceps* (Gunther), 1859

The ink drawings of head scalation are totally erroneous. For example, the inverted lateral view of the head shows a loreal scale, a scale totally absent in this species. This snake is rather known as the Small-spotted coral snake.

Pages 258-285: Sea snakes

It is very difficult to understand why WN regarded these highly dangerous species as "mildly venomous." Inexperienced readers should beware. There are surely differences in the toxicity of the venoms of these front-fanged snakes, but most if not all should be considered dangerously venomous. Some, such as *Enhydrina schistosa* (p. 266), are among the most venomous snakes in the world.

Pages 260-261: *Aipysurus eydouxii* (Gray), 1849

This species is better known as the White-spotted seasnake.

Pages 262-263: *Kerilia jerdoni* Gray, 1849

The specific epithet is misspelled, and should appear as *jerdonii* to follow its original spelling. This snake is usually known as Jerdon's seasnake.

Pages 264-265: *Disteira stokesii* (Gray), 1846

The genus *Astrotia* Fischer, 1855, is largely currently regarded as valid, whereas Rasmussen (1996) regarded *Disteira* Lacepède, 1804 as a synonym of *Hydrophis* Latreille in Sonnini and Latreille, 1801 (see David and Ineich, 1999 for a summary). The common name is incorrect. It should appear as the Stokes's seasnake.

Pages 266-267: *Enhydrina schistosa* Daudin, 1803

The more commonly accepted common name is the Beaked sea snake.

Pages 268-269: *Thalassophis annandalei* (Laidlaw), 1901

The author's name is misspelled, and should appear as Laidlaw. The depicted specimens look more like a *Hydrophis cyanocinctus*, or *H. spiralis*. Furthermore, Smith (1926) placed the species *annandalei* in his new genus *Kolpophis*; this combination has been accepted by subsequent authors. Thus, it should currently appear as *Kolpophis annandalei* (Laidlaw, 1901). The usual common name of *K. annandalei* is the Big-headed seasnake.

Pages 270-271: *Lapesnis curtus* Shaw, 1802

The generic name is misspelled, and should appear as *Lapemis*. Furthermore, this species was described as *Hydrus curtus* Shaw, 1802, and it should be noted as *Lapemis curtus* (Shaw, 1802).

Pages 272-273: *Microcephalophis gracilis* Shaw, 1802

This species was described as *Hydrus gracilis* Shaw, 1802, and the species should be noted as *Microcephalophis gracilis* (Shaw, 1802). The generic position of this taxon is quite controversial. It is now usually placed in the genus *Hydrophis* (see David and Ineich, 1999).

Pages 274-275: *Leioselasma cyanocincta* (Daudin), 1803

The name *Leioselasma* Lacepède, 1804 was resurrected at the generic level by Kharin (1984), but this interpretation has not been accepted. It is now regarded as a synonym of *Hydrophis* (see David and Ineich, 1999). This species is currently known as *Hydrophis cyanocinctus* Daudin, 1803. This species is better known as the Annulated seasnake.

Pages 276-277: *Hydrophis bituberculatus* Peter, 1872

The author and date of description are incorrect, and should appear as Peters, 1873.

Page 279 *Hydrophis fasciatus* (Schneider), 1799

This is yet another critical misidentification. The specimen depicted at the top of p. 279 is not *Hydrophis fasciatus*. According to its pattern, it is more likely *H. spiralis* or *H. cyanocinctus*. The common name given by WN is totally inappropriate to the color and pattern of *H. fasciatus*; the Striped sea snake is a more common vernacular name. The photographs at the bottom of the page are of questionable value.

Pages 280-281: *Hydrophis klossi* Boulenger, 1912

The common name given by WN is a product of his imagination. The most common name for the species is the Kloss' sea snake.

Page 282: *Hydrophis torquatus* Gunther, 1864  
The specific nomen is misspelled, and should appear as *torquatus*. In literature, this species is known as the West Coast black-headed seasnake.

Page 283: *Hydrophis mamillaris* (Daudin), 1803

The specimen depicted is not *Hydrophis mamillaris*. On the basis of the pattern, it is probably *H. cyanocinctus* or *H. spiralis*. Obviously, WN is simply following Taylor (1965), but since no other researcher has discovered this species in Thai waters, its occurrence in this country is doubtful.

Pages 284-285: *Pelamis platurus* (Linnaeus), 1766

The generic nomen should appear as *Pelamis*. This wide ranging species is better known as the Yellow-bellied seasnake. According to Lanza and Boscherini (2000), the generic nomen *Pelamis* is feminine; the taxon should be known as *Pelamis platura*.

Pages 286-287: *Daboia russellii siamensis* M. Smith, 1943

The specific epithet is misspelled and the date of description of the subspecies, described as *Vipera russellii siamensis*, is erroneous. This

taxon should appear as *Daboia russellii siamensis* (Smith, 1917) (see Adler et al. [2001] on the correct spelling of the specific nomen). The map is wrong, as, besides the Central plain, this species is also present in several regions of Northeast and Southeast Thailand. The specimen shown on p. 287 presents a very unusual pattern, reduced to a dark brown vertebral stripe, edged with black, on a nearly uniformly very pale brown background. The common name of this well-known species should appear as the Russell's viper.

Pages 288-289: *Calloselasma rhodostoma* Boie, 1827

This well-known species is usually called the Malayan pitviper.

Pages 290-291: *Ovophis monticola* (Gunther), 1864

The subspecies present in Thailand is *Ovophis monticola convictus* (Stoliczka, 1870). The map is partly wrong, as this species, to our best knowledge, has not been recorded from Northeast Thailand (Isan). It is usually known throughout its range as the Mountain pitviper.

Pages 292-293: *Trimeresurus albolabris* Gray, 1842

This species was described as *Trimeresurus albolabris*, so it should be noted as *Trimeresurus albolabris* (Gray, 1842). Contrary to what the map suggests, this species is largely absent from South Thailand. The common name of this species in literature is usually the White-lipped pitviper, and not the Green pitviper, a name that applies to all green species of *Trimeresurus*.

Pages 294-295: *Trimeresurus kanburiensis* Smith, 1943

The depicted specimens are all *Trimeresurus purpureomaculatus* (Gray, 1832), a species different in scalation from *Trimeresurus kanburiensis* (see below). This is a typical example of a mistake repeated at length in the literature. It is quite hard to understand how such so different taxa could be confused for so

many years. The confusion first appeared in Nootpand (1971), and was repeated in Thumwipat and Nutphand (1982), Reitingger (1978) and some other publications for herpetoculturists. For years, such animals were offered by the pet trade under this erroneous name. It is interesting to note that the map provided by WN is more or less correct for *Trimeresurus purpureomaculatus*. As currently understood, *Trimeresurus kanburiensis*, a species distinct from *Trimeresurus venustus* Vogel, 1990, is known only from Kanchanaburi Province of West Thailand. Also interesting is the fact that the photos of the head at the bottom of p. 294, unfortunately of poor quality, show the dark, plain colored morph of *T. purpureomaculatus*, mostly present in West Malaysia. Lastly, *Trimeresurus kanburiensis* is known in the literature as the Kanburi Pit Viper, whereas *Trimeresurus purpureomaculatus* is the Mangrove pitviper.

Pages 296-297: *Trimeresurus popeiorum* Smith, 1937

This is another persistent and hard-to-die identification mistake first made in Nootpand (1971), perpetuated by him in Thumwipat and Nutphand (1982), and repeated by various authors. It is incomprehensible to see that WN continues to perpetuate in this publication a mistake made 31 years ago. The species depicted on pp. 296 and 297 is *Trimeresurus macrops* Kramer, 1977. This species is easily distinguished from *T. popeiorum* as follows: the first supralabials of *T. macrops* are fused with its nasals, those of *T. popeiorum* are separated; *T. macrops* has a rounded head, that of *T. popeiorum* is flat and elongated; the occipital and temporal scales of *T. macrops* are strongly keeled and swollen, those of *T. popeiorum* are separated and not as strongly keeled. The specific nomen is misspelled, it should be *Trimeresurus popeiorum*. The map is neither correct for *Trimeresurus macrops* nor for *T. popeiorum*. The former species is known in central and eastern Thailand, whereas *T. popeiorum* is known from hilly areas of northern, western and southern Thailand.

*Trimeresurus macrops* is known as the Large-eyed Pitviper or Dark-green bamboo pitviper; *Trimeresurus popeiorum* is usually called Pope's pitviper.

Pages 298-299: *Trimeresurus purpureomaculatus* (Gray), 1830

Confusion may reach its zenith when we discuss the identity of *T. purpureomaculatus*. WN confused the identities of *Trimeresurus purpureomaculatus* and *T. venustus* more than 30 years ago in Nootpand (1971) and, incredibly, he persists in perpetuating that mistake in this book. All of the specimens depicted on pp. 298-299 should be referred to *Trimeresurus venustus*. The map is correct for *T. venustus*. Contrary of Viravan et al. (1992), we regard *T. kanburiensis* and *T. venustus* as morphologically close but distinct taxa. Differences will be explained in David et al. (2004).

Pages 300-301: *Trimeresurus erythrurus* (Cantor), 1839

Yet another long-lived mistake in all WN's publications. The depicted specimens are all *Trimeresurus popeiorum* Smith, 1937. Obviously, WN never examined a true *T. erythrurus*, a species clearly different in body and head scalation from *T. popeiorum*. The differences between the two are sharp and distinct: the first supralabials of *Trimeresurus erythrurus* are united with the nasals, those of *T. popeiorum* are separated; *T. erythrurus* has 23 or 25 (rarely 21) strongly keeled dorsal scale rows at midbody, *T. popeiorum* has 21 smooth or slightly keeled scale rows; *T. erythrurus* has small, distinctly tuberculate cephalic scales enlarged and strongly keeled on the posterior part of the head, they are flat and smooth above and weakly keeled posteriorly on *T. popeiorum*; *T. erythrurus* has strongly keeled temporals, they are smooth or barely keeled in *T. popeiorum*. Furthermore, *T. erythrurus* has yet to be recorded in Thailand, not even in the many years since WN first made and then perpetuated this mistake. The head drawings show indeed *T. popeiorum*, whereas the map is

erroneous for this latter species, known also in the north, west and south of the country.

Pages 302-303: *Trimeresurus stejnegeri* Schmidt, 1925

In this account, depicted specimens all are females of *Trimeresurus albolabris*. We refer to David et al. (2001) for a discussion of the confusion between *T. albolabris* and *T. vogeli* David, Vidal and Pauwels, 2001, a species long confused with *T. stejnegeri*. WN's fanciful drawings do not depict a *T. stejnegeri*, nor even any known *Trimeresurus* species.

Pages 304-305: *Trimeresurus wiroti*, 1989

The name of the describer is missing and the date is erroneous. *Trimeresurus wiroti* was described in Trutnau (1981). Nutphand et al. (1991a) regarded this latter taxon as a synonym of *T. puniceus*, an interpretation not followed, or forgotten, in WN's book (see below). *T. wiroti* is currently regarded as a synonym of *T. borneensis*, and not of *T. puniceus* (see David and Ineich, 1999). If the pictures are intended indeed to depict Thai male specimens of *T. borneensis*, with their typical coloration and pattern, the head drawings are incorrect in showing a divided second supralabial. In Thai specimens, as in animals from West Malaysia, Sumatra and Borneo referred to *T. borneensis*, the second supralabial is entire. *Trimeresurus borneensis* is commonly known as the "Flat-nosed Pitviper".

Page 306: *Trimeresurus pumceus* (Boie), 1827

The specific epithet should be spelled *puniceus*. However, the species is erroneously identified, both photos on p. 306 depict females of *T. borneensis*. The undivided second supralabial is clearly visible in the picture on the bottom of the page. It is always divided in true *T. puniceus*, a species living in the Indonesian islands of Java, Sumatra (south), Mentawai and Natuna.

Pages 308-309: *Trimeresurus sumatranus* (Raffles), 1822

The species is again erroneously identified, as all pictures show typical specimens of *Trimeresurus hageni* (Van Lidth de Jeude, 1886). To our best knowledge, only one specimen of *Trimeresurus sumatranus* has been recorded from Thailand (Betong, Yala Province) (Dring, 1979). Head drawings are erroneous both for *T. hageni* and *T. sumatranus*. The map is greatly exaggerated for *T. hageni*, as this taxon is known only from extreme southern Thailand. This species is usually known as the Hagen's pitviper.

Pages 310-311: *Tropidolaemus wagleri* (Schlegel), 1837

As shown in David and Vogel (1996), the correct authorship and date of description should be credited to Wagler (1830). This common and wide ranging species is usually known as the Wagler's pitviper or Temple viper.

Pages 312-313: *Tropidolaemus wagleri*

The depicted animals are puzzling. They are definitely not *Tropidolaemus wagleri*. Gumprecht (2001) identified them as *Trimeresurus macrops*. It appears that the depicted specimens share with *T. macrops* the large yellow eyes and the strongly keeled occipital and temporal scales, but the body pattern is quite different. We never encountered such a pitviper, and, for the present time, we refrain from identifying them.

## CONCLUSION

With this interesting pitviper ends this incredible book. We have never seen anything written by a herpetologist plagued with so many mistakes and carelessness as this book. It is usual at the end of an unfavorable book review to conclude with words requesting the reader

not to purchase a copy of the reviewed book. In the present case, we suggest different conclusions.

Cynically, we might recommend that readers purchase a copy. This book is filled with so many mistakes and was so carelessly prepared that it is unlikely to be surpassed. At least, we hope we never again see anything approaching the poor quality of this book. Therefore, it is likely to become a collector's item. More seriously, our best advice is not to buy this book. Its cover is attractive and it contains some good photographs, but that is the extent of what we can say that is good about it. This book is, however, the most recent general publication on the snakes of Thailand. For this reason, it should be considered in any list of herpetological publications on this country, but should be used with extreme caution. We strongly plead against overlooking Nutphand's latest output in any bibliography, just as we would plead for considering and citing any other locally published book. We, however, do that in urging readers to be aware of the shortcomings of the present book. The carelessness with which it was composed and the incredible number of errors make it a

contributor to herpetological confusion rather than a contribution to herpetological knowledge. WN began publishing herpetological books and articles containing mistakes over 30 years ago. His previous works have, no doubt, confused and misled Thai students of herpetology. During that time it is obvious that he did not consult many, if any, of the numerous publications that called attention to and corrected his original mistakes. He co-authored several publications that corrected his earlier mistakes but those same mistakes are repeated in this, his most recent, book. Our feelings include a strong, bitter taste of waste, waste in regard to the attractive appearance of the book, waste of the editorial effort that went into the book, and the probable waste of many original data lost among so many mistakes and so much nonsense. No doubt that a careful author, a good editorial committee or a competent publisher would have transformed this book into a most valuable addition to the Asian herpetological literature.

We will conclude this review by trying to achieve its final goal. As a help to all persons concerned with Thai snake fauna, we present an up to date list of currently known taxa.

#### **Family Typhlopidae**

- Ramphotyphlops albiceps* (Boulenger, 1898)
- Ramphotyphlops braminus* (Daudin, 1803)
- Ramphotyphlops lineatus* (Schlegel, 1839)
- Typhlops diardii* Schlegel, 1839
- Typhlops floweri* Boulenger in Flower, 1899
- Typhlops khoratensis* Taylor, 1962
- Typhlops muelleri* Schlegel, 1839
- Typhlops porrectus* Stoliczka, 1871
- Typhlops roxanae* Wallach, 2001
- Typhlops siamensis* Günther, 1864
- Typhlops trangensis* Taylor, 1962

#### **Family Cyliandrophiidae**

- Cylindrophis ruffus* (Laurenti, 1768)
- Cylindrophis ruffus ruffus* (Laurenti, 1768)

#### **Family Xenopeltidae**

- Xenopeltis unicolor* Boie, 1827



**Family Pythonidae**

*Python brongersmai* Stull, 1938

*Python molurus* Linnaeus, 1758

*Python molurus bivittatus* Kuhl, 1820

*Python reticulatus* (Schneider, 1801)

**Family Acrochordidae**

*Acrochordus granulatus* (Schneider, 1799)

*Acrochordus javanicus* Hornstedt, 1787

**Family Colubridae**

Subfamily Colubrinae

*Ahaetulla fasciolata* (Fischer, 1885)

*Ahaetulla mycterizans* (Linnaeus, 1758)

*Ahaetulla nasuta* (Lacepède, 1789)

*Ahaetulla prasina* (Boie, 1827)

*Ahaetulla prasina prasina* (Boie, 1827)

*Boiga cyanea* (Boie, 1827)

*Boiga cynodon* (Boie, 1827)

*Boiga dendrophila* (Boie, 1827)

*Boiga dendrophila melanota* (Boulenger, 1896)

*Boiga drapiezii* (Boie, 1827)

*Boiga jaspidea* (Duméril, Bibron and Duméril, 1854)

*Boiga multomaculata* (Boie, 1827)

*Boiga nigriceps* (Günther, 1863)

*Boiga nigriceps nigriceps* (Günther, 1863)

*Boiga ocellata* Kroon, 1973

*Boiga saengsomi* Nutphand, 1985

*Calamaria lumbricoidea* Boie in Boie, 1827

*Calamaria pavementata* Duméril, Bibron and Duméril, 1854

*Calamaria schlegeli* Duméril, Bibron and Duméril, 1854

*Calamaria schlegeli schlegeli* Duméril, Bibron and Duméril, 1854

*Chrysopelea ornata* (Shaw, 1802)

*Chrysopelea ornata ornatissima* Werner, 1925

*Chrysopelea paradisi* Boie, 1827

*Chrysopelea paradisi paradisi* Boie, 1827

*Chrysopelea pelias* (Linnaeus, 1758)

*Coelognathus flavolineatus* (Schlegel, 1837)

*Coelognathus radiatus* (Boie, 1827)

*Dendrelaphis caudolineatus* (Gray, 1834)

*Dendrelaphis caudolineatus caudolineatus* (Gray, 1834)

*Dendrelaphis cyanochloris* (Wall, 1921)

*Dendrelaphis formosus* (Boie, 1827)

*Dendrelaphis pictus* (Gmelin, 1789)

*Dendrelaphis pictus pictus* (Gmelin, 1789)

- Dendrelaphis striatus* (Cohn, 1905)  
*Dendrelaphis subocularis* (Boulenger, 1888)  
*Dinodon septentrionale* (Günther, 1875)  
*Dryocalamus davisonii* (Blanford, 1878)  
*Dryocalamus subannulatus* (Duméril, Bibron and Duméril, 1854)  
*Dryophiops rubescens* (Gray, 1834)  
*Gongylosoma baliodeira* (Boie, 1827)  
     *Gongylosoma baliodeira cochranæ* (Taylor, 1962)  
*Gongylosoma scriptum* (Theobald, 1868)  
*Gonyosoma oxycephalum* (Boie, 1827)  
*Gonyosoma prasinum* (Blyth, 1854)  
*Lepturophis albofuscus* (Duméril, Bibron and Duméril, 1854)  
*Liopeltis tricolor* (Schlegel, 1837)  
*Lycodon butleri* Boulenger, 1900  
*Lycodon capucinus* Boie, 1827  
*Lycodon effraenis* Cantor, 1847  
*Lycodon fasciatus* (Anderson, 1879)  
*Lycodon laoensis* Günther, 1864  
*Lycodon subcinctus* Boie, 1827  
     *Lycodon subcinctus subcinctus* Boie, 1827  
*Oligodon barroni* (Smith, 1916)  
*Oligodon cinereus* (Günther, 1864)  
*Oligodon cyclurus* (Cantor, 1839)  
*Oligodon dorsalis* (Gray, 1835)  
*Oligodon fasciolatus* (Günther, 1864)  
*Oligodon inornatus* (Boulenger, 1914)  
*Oligodon jintakunei* Pauwels, Wallach, David and Chanhome, 2002  
*Oligodon joysoni* (Smith, 1917)  
*Oligodon mouhoti* (Boulenger, 1914)  
*Oligodon purpurascens* (Schlegel, 1837)  
*Oligodon taeniatus* (Günther, 1861)  
*Oligodon theobaldi* (Günther, 1868)  
*Oreophis porphyraceus* (Cantor, 1839)  
     *Oreophis porphyraceus porphyraceus* (Cantor, 1839)  
     *Oreophis porphyraceus coxi* Schulz and Helfenberger, 1998  
*Orthriophis taeniurus* Cope, 1861  
     *Orthriophis taeniurus ridleyi* (Butler, 1899)  
     *Orthriophis taeniurus yunnanensis* Anderson, 1879  
*Psammodynastes pulverulentus* (Boie, 1827)  
*Pseudorabdion longiceps* (Cantor, 1847)  
*Ptyas carinata* (Günther, 1858)  
*Ptyas fusca* (Günther, 1858)  
*Ptyas korros* (Schlegel, 1837)  
*Ptyas mucosa* (Linnaeus, 1758)  
*Sibynophis collaris* (Boie, 1826)  
*Sibynophis melanocephalus* (Gray, 1835)  
     *Sibynophis melanocephalus melanocephalus* (Gray, 1835)

*Sibynophis triangularis* Taylor and Elbel, 1958  
*Xenelaphis hexagonotus* (Cantor, 1847)

Subfamily Homalopsinae

*Bitia hydroides* Gray, 1842  
*Cantoria violacea* Girard, 1857  
*Cerberus rynchops* (Schneider, 1799)  
*Cerberus rynchops rynchops* (Schneider, 1799)  
*Enhydris bocourti* (Jan, 1865)  
*Enhydris enhydris* (Schneider, 1799)  
*Enhydris innominata* (Morice, 1875)  
*Enhydris innominata smithi* (Boulenger, 1914)  
*Enhydris jagori* (Peters, 1863)  
*Enhydris plumbea* (Boie, 1827)  
*Erpeton tentaculatum* Lacepède, 1800  
*Fordonia leucobalia* (Schlegel, 1837)  
*Gerarda prevostiana* (Eydoux and Gervais, 1837)  
*Homalopsis buccata* (Linnaeus, 1758)

Subfamily Natricinae

*Amphiesma bitaeniatum* (Wall, 1925)  
*Amphiesma deschauenseei* (Taylor, 1934)  
*Amphiesma groundwateri* (Smith, 1921)  
*Amphiesma inas* (Laidlaw, 1901)  
*Amphiesma khasiense* (Boulenger, 1890)  
*Amphiesma stolatum* (Linnaeus, 1758)  
*Macropisthodon flaviceps* (Duméril, Bibron and Duméril, 1854)  
*Macropisthodon rhodomelas* (Boie, 1827)  
*Opisthotropis praemaxillaris* (Angel, 1929)  
*Opisthotropis spenceri* Smith, 1918  
*Parahelicops boonsongi* Taylor and Elbel, 1958  
*Rhabdophis chrysargos* (Schlegel, 1837)  
*Rhabdophis nigrocinctus* (Blyth, 1855)  
*Rhabdophis subminiatus* (Schlegel, 1837)  
*Rhabdophis subminiatus subminiatus* (Schlegel, 1837)  
*Rhabdophis subminiatus helleri* (Schmidt, 1925)  
*Sinonatrix percarinata* (Boulenger, 1899)  
*Sinonatrix percarinata percarinata* (Boulenger, 1899)  
*Xenochrophis flavipunctatus* (Hallowell, 1860)  
*Xenochrophis piscator* (Schneider, 1799)  
*Xenochrophis piscator piscator* (Schneider, 1799)  
*Xenochrophis punctulatus* (Günther, 1858)  
*Xenochrophis trianguligerus* (Boie, 1827)

Subfamily Pareatinae

*Aplopeltura boa* (Boie, 1828)  
*Asthenodipsas laevis* (Boie, 1827)

*Asthenodipsas malaccanus* Peters, 1864  
*Pareas carinatus* Wagler, 1830  
*Pareas macularius* Theobald, 1868  
*Pareas margaritophorus* (Jan in Bocourt, 1866)

Subfamily Psammophiinae

*Psammophis indochinensis* Smith, 1943

Subfamily Pseudoxenodontinae

*Plagiopholis nuchalis* (Boulenger, 1893)  
*Pseudoxenodon macrops* (Blyth, 1854)  
*Pseudoxenodon macrops macrops* (Blyth, 1854)

Subfamily Xenoderminae

*Xenodermus javanicus* Reinhardt, 1836

**Family Elapidae**

Subfamily Elapinae

*Calliophis bivirgatus* (Boie, 1827)  
*Calliophis bivirgatus flaviceps* (Cantor, 1839)  
*Calliophis gracilis* Gray, 1835  
*Calliophis intestinalis* (Laurenti, 1768)  
*Calliophis intestinalis lineatus* (Gray, 1835)  
*Calliophis maculiceps* (Günther, 1858)  
*Sinomicrurus maccllellandi* (Reinhardt, 1844)  
*Sinomicrurus maccllellandi maccllellandi* (Reinhardt, 1844)

Subfamily Bungarinae

*Bungarus candidus* (Linnaeus, 1758)  
*Bungarus fasciatus* (Schneider, 1801)  
*Bungarus flaviceps* Reinhardt, 1843  
*Bungarus flaviceps flaviceps* Reinhardt, 1843  
*Naja kaouthia* Lesson, 1831  
*Naja siamensis* Laurenti, 1768  
*Naja sumatrana* Müller, 1887  
*Ophiophagus hannah* (Cantor, 1836)

Subfamily Laticaudinae

*Laticauda colubrina* (Schneider, 1799)  
*Laticauda laticaudata* (Linnaeus, 1758)

**Family Hydrophiidae**

*Acalyptophis peronii* Duméril, 1853  
*Aipysurus eydouxii* (Gray, 1849)  
*Astrotia stokesii* (Gray, 1846)  
*Enhydrina schistosa* (Daudin, 1803)  
*Hydrophis atriceps* Günther, 1864

*Hydrophis belcheri* (Gray, 1849)  
*Hydrophis bituberculatus* Peters, 1873  
*Hydrophis brookii* Günther, 1872  
*Hydrophis caeruleus* (Shaw, 1802)  
*Hydrophis cantoris* Günther, 1864  
*Hydrophis cyanocinctus* (Daudin, 1803)  
*Hydrophis fasciatus* (Schneider, 1799)  
*Hydrophis gracilis* (Shaw, 1802)  
*Hydrophis klossi* Boulenger, 1912  
*Hydrophis lamberti* Smith, 1917  
*Hydrophis lapemoides* (Gray, 1849)  
*Hydrophis melanosoma* Günther, 1864  
*Hydrophis ornatus* (Gray, 1842)  
*Hydrophis spiralis* (Shaw, 1802)  
*Hydrophis torquatus* Günther, 1864  
     *Hydrophis torquatus aagaardi* Smith, 1920  
     *Hydrophis torquatus diadema* Günther, 1864  
*Kerilia jerdonii* Gray, 1849  
*Kolpophis annandalei* (Laidlaw, 1901)  
*Lapemis curtus* (Shaw, 1802)  
*Pelamis platura* (Linnaeus, 1766)  
*Thalassophina viperina* (Schmidt, 1852)  
*Thalassophis anomalus* Schmidt, 1852

#### Family Viperidae

*Daboia russelii* (Shaw and Nodder, 1797)  
     *Daboia russelii siamensis* (Smith, 1917)

#### Family Crotalidae

*Calloselasma rhodostoma* (Boie in Boie, 1827)  
*Ovophis monticola* (Günther, 1864)  
     *Ovophis monticola convictus* (Stoliczka, 1870)  
*Trimeresurus albolabris* (Gray, 1842)  
*Trimeresurus borneensis* (Peters, 1872)  
*Trimeresurus gumprechtii* David, Vogel, Pauwels and Vidal, 2002  
*Trimeresurus hageni* (Lidth de Jeude, 1886)  
*Trimeresurus kanburiensis* Smith, 1943  
*Trimeresurus macrops* Kramer, 1977  
*Trimeresurus popeiorum* Smith, 1937  
     *Trimeresurus popeiorum popeiorum* Smith, 1937  
*Trimeresurus purpureomaculatus* (Gray, 1832)  
*Trimeresurus sumatranus* (Raffles, 1822)  
*Trimeresurus venustus* Vogel, 1991  
*Trimeresurus vogeli* David, Vidal and Pauwels, 2001  
*Tropidolaemus wagleri* Wagler, 1830

Comments on this preliminary list will be published elsewhere. Nevertheless, we point out that (1) we do not include *Stegonotus borneensis* Inger, 1967 in the fauna of Thailand, a species cited with doubt by Thirakhupt (2000) without voucher specimen; (2) no subspecies of *Calliophis maculiceps* are recognized, according to Cox (2000); and (3) we take the opportunity of the present paper to point out a mistake that appeared in Chan-ard et al. (1999), and which remained unnoticed by David and Pauwels (2000). A closer examination of the picture showed that the specimens identified in Chan-ard et al. (1999) as *Bungarus* cf. *multicinctus* lacked the diagnostic enlarged vertebral scales of the genus *Bungarus*. H. Ota (pers. comm., May 2002), who examined this specimen, confirmed to us that it is in fact a *Dinodon septentrionale*. As a consequence, *Bungarus multicinctus* Blyth, 1861, a species known from China, Taiwan, Vietnam, Laos and Myanmar, should be currently deleted from the Thai snake fauna. However, we consider this mistake to be significant, because it is very symptomatic of the difficulty to identify a species from pictures only, even of good quality.

This list is still provisional, as, for example, within four years, no less than seven species were added to the snake fauna of Thailand (*Amphiesma bitaeniatum* [recorded by David and Pauwels, 2000], *Amphiesma khasiense* [recorded by Chanhome et al., 2001], *Oligodon jintakunei* [described by Pauwels et al., 2002c], *Trimeresurus gumprechtii* [described by David et al., 2002], *Trimeresurus vogeli* [described by David et al., 2001], *Typhlops roxanaeae* [described by Wallach, 2001], and *Xenochrophis punctulatus* [recorded by Pauwels et al., 2002a]). No doubt careful examination of specimens preserved in local collections as well as on-going investigations, especially in northern, western and southern Thailand, will increase the number of snake species in Thailand. Let us hope that this herpetological richness will just lead to a greater interest in their snake fauna among Thai herpetologists,

and that a sound and up-to-date reference book, the complete opposite of Nutphand's opus, will appear in the not too distant future.

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