

# Contribution to the knowledge of the snake fauna of Masbate (Philippines)

(Squamata: Serpentes)

Beitrag zur Kenntnis der Schlangenfauna von Masbate (Philippinen)  
(Squamata: Serpentes)

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## KURZFASSUNG

Während eines kurzen Aufenthaltes auf Masbate (Philippinen) wurden 10 Schlangenarten gefunden, von denen 9 bisher von Masbate nicht bekannt waren. Damit verlängert sich die Liste der bekannten Schlangen Masbates von 2 auf 11 Arten. Zwei der Neunachweise, *Calliophis calligaster gemianulis* und *Elaphe erythrura psephenoura*, bekräftigen die Zugehörigkeit Masbates zum "West Visaya" - Faunendistrikt, während das Auftreten von *Naja philippinensis* auf Einflüsse des "Luzon" - Faunendistriktes hinweist.

## ABSTRACT

During a short stay on Masbate (Philippines) 10 snake species were obtained, 9 of them hitherto unreported from this island. This extends the list of snake species from Masbate from 2 to 11 species. Two of the new records, *Calliophis calligaster gemianulis* and *Elaphe erythrura psephenoura*, do confirm the association of Masbate to the Western Visayan faunal district, whereas the Luzon faunal district is represented by *Naja philippinensis*.

## KEYWORDS

Serpentes, new records; Philippines, Masbate; faunal districts

Even though Masbate is one of the larger Philippine Islands, with a land area of 1571 square miles, only two species of land snakes have been reported from it (LEVITON 1963). These are *Lycodon capucinus* BOIE, 1827 (i. g. *L. aulicus capucinus*) and *Macropophis dendrophiops negrosensis* (TAYLOR, 1917) (i. g. *Natrix dendrophiops negrosensis*). While the first species is widespread throughout the Philippines, the other is known only from Cebu, Masbate, Negros, and Panay (LEVITON 1963). During a short stay in the vicinity of the village of Mobo on Masbate in April 1988, ten species of snakes were recorded, nine of them previously unknown to occur on the island [SMF = Forschungsinstitut Senckenberg / Frankfurt a. M., Germany]:

- \* *Acrochordus granulatus* (SCHNEIDER, 1799) [SMF 74434]
- \* *Python reticulatus* (SCHNEIDER, 1801) [SMF 74360]
- \* *Cerberus rynchops* (SCHNEIDER, 1799) [SMF 74341-2]

- \* *Chrysopelea paradisi variabilis* MERTENS, 1968 [SMF 74598-9]
- \* *Dendrelaphis caudolineatus* ssp. [SMF 74600]
- \* *Dendrelaphis pictus pictus* (GMELIN, 1789) [SMF 74356-9]
- \* *Elaphe erythrura psephenoura* LEVITON, 1977 [SMF 74362]
- \* *Lycodon capucinus* BOIE, 1826 [SMF 74340]
- \* *Calliophis calligaster gemianulis* (PETERS, 1872) [SMF 74435]
- \* *Naja philippinensis* TAYLOR, 1922 [SMF 74100, 74140]

The main purpose of the stay on Masbate was the observation of *Varanus salvator* (LAURENTI, 1768). No intensive search for other reptiles took place, and the specimens reported here were found just by chance. Snakes killed by people, or run over by vehicles were transferred to SMF. Most of these species are relatively common, large, and diurnal snakes. This leads to the assumption that many more snake species can be expected

on Masbate, especially smaller and secretive living ones like *Calamaria* sp., *Pseudorabdion* sp., or *Typhlops* sp., and also nocturnal ones like *Boiga* sp.

Masbate is situated in between Luzon in the north, Panay, Negros, and Cebu in the southwest and south, and Samar in the east (fig. 1). These islands represent three different faunal districts: the Luzon district, the Western Visayan district, and the Mindanao district (LEVITON 1963). Masbate geographically belongs to the central Visayan Islands since it rests upon the shallow Visayan submarine shelf, and is separated from Luzon and Samar by the deep Ticao and Samar straits. This is supported by affinities in their avian, lepidopteran (DICKERSON 1928), and land mollusc (COOKE 1892) faunas. However, since only few reptiles have been reported from the island before, the relation of its herpetofauna is poorly known. Several of the snakes listed above are widespread throughout the Philippines, and therefore of little significance for the regional zoogeography. Only those forms which have undergone differentiation within the Philippines are of interest in determining the Masbate herpetofaunal affinities.

Three subspecies of *Dendrelaphis caudolineatus* (GRAY, 1834) occur within the Philippines: *D. c. luzonensis* LEVITON, 1961 in the north (Luzon and adjacent Islands), *D. c. terrificus* (PETERS, 1872) on the Visayan Islands and Mindanao, and the nominate form in the Palawan region (LEVITON 1968). In general they are easily distinguishable by their different number of black stripes on lighter ground. Unfortunately the only specimen found on Masbate [SMF 74600] lacks any markings. While TAYLOR (1922) assigned the unpatterned forms to *D. modestus* BOULENGER, 1894 (i. g. *D. caudolineatus modestus*), LEVITON (1968) regards them as abnormal colour variations, which occur in *D. c. luzonensis* and, more often, in *D. c. terrificus*. *D. c. luzonensis* is known from Ticao (LEVITON 1968), a small island very close to Masbate, and due to the close geographical proximity it can be assumed that the spe-

cimen found on Masbate belongs to this subspecies.

Four subspecies of *Elaphe erythrura* (DUMÉRIL, BIBRON & DUMÉRIL, 1854) occur in the Philippines (LEVITON 1977): *E. e. manillense* LEVITON, 1977 occurs on Luzon, *E. e. psephenoura* LEVITON, 1977 on the central Visayan Islands, the nominate form on the eastern Visayas and Mindanao, and *E. e. philippina* GRIFFIN, 1909 in the Palawan Province. The new record extends the known range of *E. e. psephenoura* to Masbate in the north.

*Calliophis calligaster* (WIEGMANN, 1834) seems to have a restricted distribution within the Philippines. The nominate form is known from Luzon only, *C. c. gemianulis* from Cebu, Negros, and Panay (LEVITON 1964), and now also from Masbate.

The situation with the cobra is more confused. Cobras were hitherto unknown and regarded as absent in the central Visayan Islands. The record of *N. philippinensis* from Masbate in WÜSTER & THORPE (1991), who raised the Philippine cobras to species level after a comprehensive systematic study, is based on our specimen SMF 74100. *N. samarensis* PETERS, 1861 is known from the eastern Visayas and Mindanao, *N. sumatrana* BOULENGER, 1896 from Palawan, and *N. philippinensis* from Luzon, Mindoro and Marinduque (WÜSTER & THORPE 1991).

The new records of *E. e. psephenoura* and *C. c. gemianulis* confirm the affinities of Masbate to the central Visayan faunal district (see also LEVITON 1963). The record of the cobra on Masbate is somewhat surprising. *N. philippinensis* is rather common and widely distributed on this island according to information from inhabitants. Either this snake was accidentally introduced from Luzon some time ago, or there once must have been a migration pathway. The second possibility would be supported, when additional specimens of *D. caudolineatus* from Masbate confirm the provisional assignment of SMF 74600 to *luzonensis*.

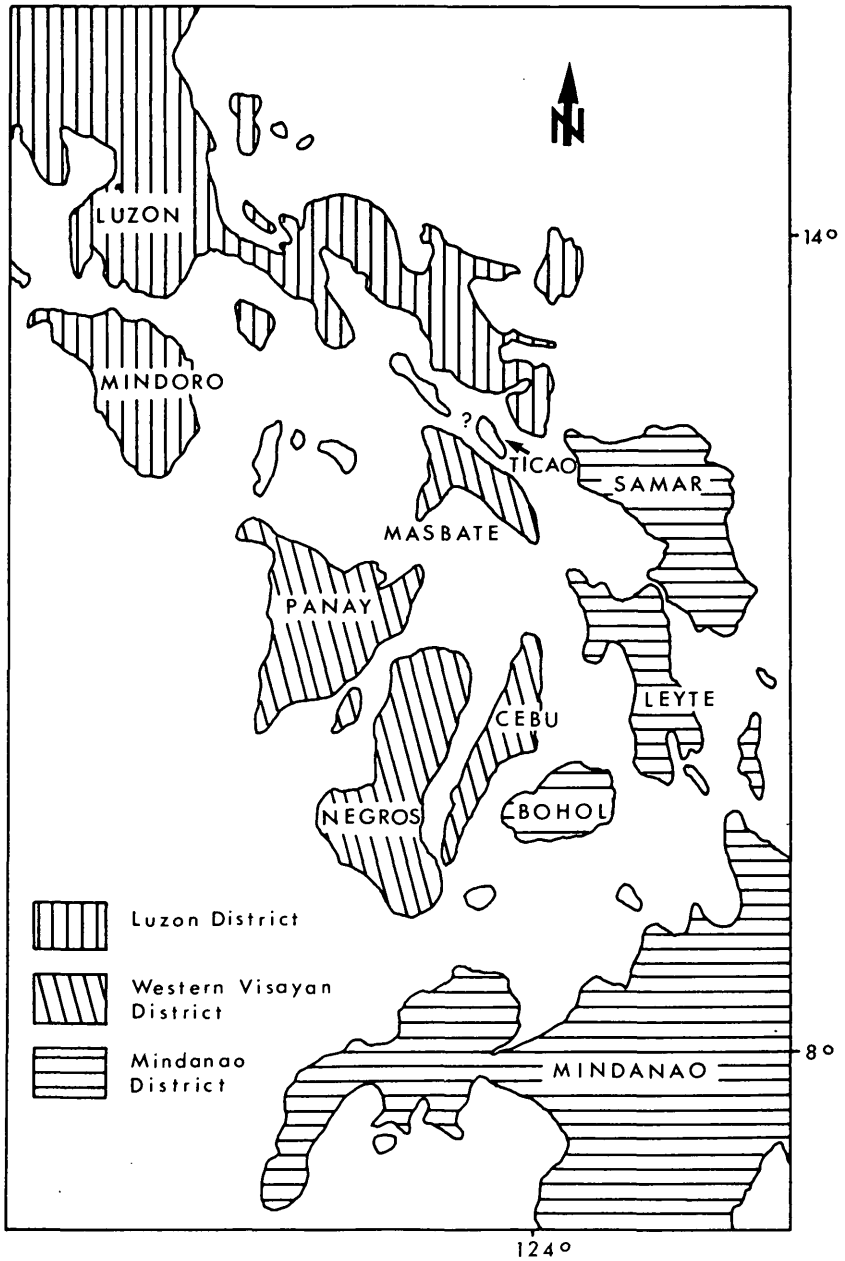


Fig. 1: Position of the Philippine island Masbate within the Luzon, Western Visayan, and Mindanao faunal districts.

Abb. 1: Lage der philippinischen Insel Masbate innerhalb des Luzon-, West Visaya- und Mindanao-Faunendistriktes.

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