

TWO LITTLE KNOWN SNAKES FROM KHAO YAI*

by

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ABSTRACT

This records the third authentic occurrence of *Calliophis maclellandii maclellandii* (REINHARDT) in Thailand, and the second authenticated record of *Sibynophis triangularis* TAYLOR & ELBEL. Observations are based on a single adult female specimen of *C. m. maclellandii* collected by Mr. J.A. TUBB on May 3, 1964, and a single adult male specimen of *S. triangularis* collected by Mr. P. REEVES on October 15, 1963. Both specimens were collected in Khao Yai National Park, Thailand.

Calliophis maclellandii maclellandii (REINHARDT)

The occurrence of a specimen of *Calliophis m. maclellandii* in Thailand is worthy of record in that there are only two former authenticated records of its occurring in that country. TAYLOR (1965, p. 969) recorded two specimens from Doi Suthep, Chiang Mai, and these are presumably the only records of the species's occurrence in Thailand.

A fine adult female specimen of this species was collected in Khao Yai National Park by Mr. J.A. TUBB on May 3, 1964. It was found dead, apparently recently run over by an automobile, on Thanarat Road, near the 34th kilometer marker from the junction of Thanarat Road and Friendship Highway (about halfway between the View Point and Wang Champi). This was at an elevation of approximately 800 meters. The specimen was preserved by Mr. TUBB and given by him to this author on April 22, 1965, and is now Specimen Number A-366 in the PAUL SODERBERG-GEOFFREY YOUNG private collection, Bangkok, Thailand. This specimen represents the third authenticated record of the occurrence of this species in Thailand.

* Khao Yai National Park is situated at the junction of the provinces of Nakhon Nayok, Prachin Buri, Sara Buri, and Nakhon Ratchasima (Khorat) - latitude 14°5' to 14°15' North, and longitude 101°5' to 105°50' East.

The particulars for this specimen, which do not entirely agree with those given for the species by various other authors, are given below.

DIAGNOSIS: Scales smooth, in 13-13-13 rows; anterior and posterior nasals separated, separated by the internasals; two prefrontals; no suboculars; 3rd supralabial enters orbit and touches posterior nasal; iris circular; ventrals 226; anal paired; subcaudals 26; maxillary teeth 4, subequal; no teeth behind the poison fangs.

DESCRIPTION: Head not readily distinct from neck, broadly oval, obtuse, slightly oblique from frontal to rostral. Rostral $1/2$ as deep (2 mm) as broad (4 mm), tapering to a bluntly rounded point posteriorly; internasals pentagonal, in contact with rostral, a little more than half the length of the prefrontals; frontal longer (3.75 mm) than broad (2.5 mm), tapered posterior portion almost half its length, about $1/2$ as long as parietals (6 mm); supraoculars longer (2.5 mm) than broad (1.8 mm); nasals separated, in contact with first 3 supralabials; no loreal; 1 preocular touching posterior nasal, and 2 postoculars; 1 + 1 temporals (left side), both large, of approximately equal size (temporals on right side of head naturally degenerated and broken into a series of small scales); supralabials 7-7, 3rd and 4th entering orbit, 3rd touching posterior nasal, 5th and 6th touching anterior temporal on left side; mental triangular; infralabials 6-6, first pair not in contact at mental groove, first 4 touching genials and in contact with anterior chin shields; posterior chin shields in contact with 3rd infralabial. Nostrils small, inconspicuous, circular. Eyes circular, relatively tiny (approximately 1.25 mm in diameter); iris circular; diameter of eye almost $1/3$ its distance from nostril, $1/2$ its shortest distance to mouth. Poison fangs small, rigid, inwardly pointing (directed toward center of throat); no teeth behind the poison fangs; maxillary teeth 4, subequal; mandibular teeth 8 (?), subequal, the first placed a wide interval in front of the others.

Body slim, sub-cylindrical; scales smooth, semi-symmetrical, imbricate, sub-quadrangular, in 13-13-13 rows; vertebral row not larger than adjacent rows; ventrals 226, large, smooth, slightly angularly-bent; anal broad, paired.



Lateral View of Head of *Calliophis macclellandii macclellandii*
(Reinhardt).



Lateral View of Head of *Sibynophis triangularis*
Taylor & Elbel.

Tail tapering gradually from broad base to stubby end, and ending in a sharp, chitinized point; subcaudals 26, all paired (This is considerably below the number range of subcaudals (36-39) given by KUNTZ (1963, p. 59) for this species. KUNTZ also reported MAKI as giving the subcaudal range as 31-41, and WANG and WANG as 34-40. SMITH (1943, p. 424), however, gave the range as 25-36.), the scale at the tip terminating in a sharp, cone-shaped point.

COLORATION: (In 70% absolute alcohol—formerly formalin): Iridescent, glossy throughout.

Head black above, the black extending onto the nape for 4 scales from the posterior junction of the parietals and contrasting sharply with the lighter color of the neck. A creamy-yellow band, not seen from above, situated on front of snout, covers the lower portions of the rostral, nasals, and first 3 supralabials (SMITH (1943, p. 424) gave the "tip of the snout often light in colour". In this specimen the light color is quite distinctly demarked from the black.). A second band, situated behind the eyes (SMITH's (1943, p.424), illustration shows the eyes in the range of the transverse white band. In this specimen the eyes are on a field of black, i.e., the white does not touch the eyes.), is much wider than the first, roughly "V"-shaped (the apex of the "V" directed toward the snout), and covers most of the 5th-7th supralabials, postoculars, anterior temporals, frontal, parietals and posterior ends of supraoculars; 4th supralabial on each side completely black. Head creamy-white below, except for a small black mark partially concealed in the mental groove, and the tops of the 3rd-5th infralabials, which are black. Tongue greyish.

Body light pinkish-brown above, each scale edged with darker brown; interstitial skin whitish. 30 regularly-spaced, transverse black crossbars (26 on body, 4 on tail (KUNTZ (1963, p. 59) gave 5 or 6 bands as being on the tail, but reported Maki as giving the number as from 4-7)), accentuated by being bordered anteriorly and posteriorly by pale whitish margination (vermillion just after death, as seen by Mr. TUBB; SMITH (1943, p. 424) did not mention this vermillion bordering coloration. KUNTZ (1963, p. 59) stated that the "anterior and posterior margins of bands may be cream or light brown".); these crossbars of

even width throughout—about the width of a single dorsal scale—and may or may not reach the belly; the last crossbar situated a very short distance from tip of tail; no intermittent markings between crossbars (SMITH (1943, p. 424) stated that “small black spots on each side of the back between the bars may be present”). Light pale yellowish or creamy-white below, the outer edges of ventrals and subcaudals sometimes clouded with light brown. 52 highly irregular black blotches placed along center of belly, each covering from 1/2 to 8 ventrals and seldom touching lowest scale rows. Anus cream-colored, immaculate. 4 irregular black blotches on subcaudals more or less forming bands which are continuous with dorsal crossbars on tail; 11 smaller black spots scattered over subcaudals.

MEASUREMENTS IN M.M.: Tip of snout to occipital region, 18; width of head at base of skull, 10; width of head just in front of eyes, 8; thickness of head throughout (dorsal to ventral), 7. Total length, 511 (estimated: completely accurate measurements of total length are impossible due to the stiff position of the snake caused by the snake's preservative). Tail, 51. Width of neck, 8.5; width of body at midbody, 11; width of body just before vent, 6; thickness of neck, 5.5; thickness of body at midbody (estimated), 9.25; thickness of body just before vent, 7.1; width of tail at base, 5.75; width of tail just before tip, 2.5; thickness of tail at base, 4.5; thickness of tail just before tip (estimated), 3.

REMARKS: The range of *Calliophis maccllellandii maccllellandii* is extended considerably southward with the finding of a specimen of that species in Khao Yai, Thailand. Outside of Thailand, the species is known in India, Nepal, Burma, Laos, Viet Nam, Cambodia, China, Taiwan, Formosa, Hainan Island, and Hong Kong. The nocturnal and secretive habits of *maccllellandii* probably account for its not having been found in Thailand more than three times, but future systematic collecting in North and Northeastern Thailand—especially at high elevations—will almost certainly show it to be widely spread throughout that country.

Besides *Calliophis m. maccllellandii*, the genus *Calliophis* in Thailand is represented by four other forms, namely, *C. gracilis* GRAY,

C. hughi COCHRAN, *C. maculiceps maculiceps* GÜNTHER, and *C. maculiceps malcolmi* TAYLOR. Of these, only *C. m. maculiceps* appears to be widespread and/or common in Thailand.

***Sibynophis triangularis* TAYLOR and ELBEL**

The occurrence of a specimen of *Sibynophis triangularis* is worthy of record in that there is only one other authenticated record of the species. TAYLOR and ELBEL (1958, pp. 1130-1134) recorded and described a single specimen collected by Dr. BOONSONG LEKAGUL on August 18, 1953 in Nongko (village), Siricha (district), Chon Buri (province), Thailand under this name, to which no other specimens have been ascribed.

On October 15, 1963, a second specimen, a fine adult male, was collected. It was found dead by Mr. P. REEVES, on the Heo Suwat road, 1/2 mile from the bungalow area in Khao Yai National Park (near the 42.5 kilometer marker). This was at an elevation of approximately 604 meters. The specimen was preserved by Mr. REEVES, and given by him to this author on November 25, 1963, and is now Specimen Number A-157 in the PAUL SODERBERG—GEOFFERY YOUNG private collection, Bangkok, Thailand. This specimen represents the second authenticated record of the occurrence of *Sibynophis triangularis*.

The particulars for this specimen, which do not entirely agree with those given for the species by various other authors, are given below.

DIAGNOSIS: Scales smooth, in 17-17-17 rows; anterior and posterior nasals separated, separated by the internasals; two prefrontals; no suboculars; 4th-7th supralabials enter orbit; iris circular; ventrals 166; anal 2; subcaudals 118. Closely related to *Sibynophis collaris* (GRAY), but differs from it in having the black nuchal band reduced to a triangle bordered on 2 sides by cream lines 1-1 1/2 scales wide, which are continuous with the cream lines on the labials; a series of cream or yellow spots chiefly on the 4th scale row; 4 tiny black dots in two pairs on each ventral anteriorly, reducing to 2 larger spots on each ventral posteriorly.

DESCRIPTION: Head slightly distinct from neck, roughly triangular, obtuse, angulate anteriorly, oblique from frontal to rostral. Rostral broader (2.75 mm) than deep (1 mm), bluntly crescent-shaped; internasals semi-circular, in contact with rostral, slightly more than 1/2 as long as parietals (5.5 mm); supraocular longer (3.75 mm) than broad (1.5 mm), narrowed anteriorly; anterior and posterior nasals separated, in contact with first 2 supralabials; loreal slightly longer than high, not in contact with internasals; 2 pre- and 2 postoculars, the lower in each case the smaller; $1 + \frac{1}{1+1}$ temporals; supralabials 10-10, 4th-7th entering orbit, 10th by far largest of series; mental triangular; infra-labials 9-9, first pair in contact at midline, first 5 touching genials, 5th by far largest of series, last 2 much reduced; anterior genials longer (3.5 mm) than posterior genials (2.5 mm). Nostrils small, inconspicuous, crescentic, the opening directed toward eye. Eyes circular, moderately large (approximately 2.3 mm in diameter); iris circular; diameter of eye equal to its distance to nostril, about 2X its shortest distance to mouth. Dentition counts not attempted.

Body slim, gradually tapering; scales smooth, semi-symmetrical, imbricate, in 17-17-17 rows; vertebral row indistinguishable from its adjacent rows; ventrals 166 (This can be considered the extreme of the ventral range for the species: TAYLOR and ELBEL's specimen had 160 ventrals.), large, smooth, slightly angularly-bent; anal broad, paired, about 2X as long as its adjacent subcaudals; dorsal scales above anal very tiny.

Tail (complete) very elongate, slim, tapering very gradually; dorsal 2-3 scale rows anteriorly very large (2-3 times as wide as vertebrales), hexagonal; subcaudals 118 (This can be considered the extreme of the subcaudal range for this species: TAYLOR and ELBEL's specimen, with an incomplete tail, had 49 subcaudals.), all paired; the scale at the tip terminating in a tiny, cone-shaped point. Hemipenis examinations not attempted.

COLORATION (In 70% absolute alcohol): Semi-iridescent, glossy throughout.

Head greyish above with scattered black spots or vermiculations, the grey becoming olivaceous on occipital scales for 3 1/2

scales from the posterior junction of the parietals. Center of frontal brownish, edges of frontal blackish giving the impression that the frontal is transversed by an obscured black band: the impression of a second black transverse band is found by the centers of the parietals being brown with their posterior edges blackish). A distinct deep black triangular nuchal band, its apex directed along vertebral row, is $6\frac{1}{2}$ scales long, and bordered on 2 sides by white lines 1-1 $\frac{1}{2}$ scales wide which terminate 2 scales from the 10th supralabials and are separated from meeting at the apex of the black triangle by a single brown scale. Supralabials 8-10 dark above, whitish below, the 2 shades separated by a deep black line which fades above into the dark coloration, and with isolated grey blotches below; the preorbital groove along the junction of the labials, loreal and preocular, indistinctly blackish; supralabials 1-6 white, each with an isolated black triangle below, and variegated with black—thus appearing grey. Rostral grey, the rostral groove whitish and bordered on either side by a black spot. Infralabials white; genials and sublabials very light grey and much variegated with light brown and grey. Tongue whitish, black near tips, with white tips.

Body generally light greyish-brown anteriorly, gradually becoming darker toward midbody, and becoming velvety-brown posteriorly. Scales on neck dark-edged anteriorly and thus appearing to be placed backwards. Two light fawn stripes beginning on neck directly after (and confluent with) the white lines enclosing the black nuchal triangle, principally on 4th and 5th scale rows on either side; at midbody these stripes become obscured, replaced by irregular small fawn spots on upper half of 4th and/or lower half of 5th scale rows on either side. Anteriorly a series of small, progressively lighter black spots runs along vertebral row to above approximately the 28th ventral, where they become obscured; these black spots replaced by a discontinuous series of almost obscured fawn spots (the length of $\frac{1}{2}$ a single dorsal scale and placed 1-2 scales apart), which become entirely lost on posterior half of body. Light yellowish-white below, the outer upturned edges of each ventral pigmented dark similar to lateral body scales. 4 tiny, rounded black spots regularly set on each ventral anteriorly, reducing gradually to 2 larger black oblongs on

outer edges of posterior ventrals and on subcaudals; these oblongs forming continuous black lateral stripes on subcaudals, which distinctly demark the dorsal dark from the ventral light.

MEASUREMENTS IN M.M. : Tip of snout to occipital region, 14.5; width of head at base of skull, 8.5; width of head just in front of eyes, 5.5; thickness of head at eyes (dorsal to ventral), 5.25. Total length, 304.8 (estimated: completely accurate measurements of total length are impossible due to the stiff position of the snake caused by the snake's preservative). Tail, 203.2 (estimated). Width of neck, 7.5; width of body at midbody, 9; width of body just before vent, 5.75; thickness of body at neck, 7.75; thickness of body at midbody, 7.5 (estimated); thickness of body just before vent, 5.75; width of tail at base; 6.00; width of tail just before tip, 0.50; thickness of tail at base, 6.00; thickness of tail just before tip, 0.50.

REMARKS: Originally (TAYLOR and ELBEL, 1958, pp. 1130-1134) *Sibynophis triangularis* was regarded as a subspecies of *S. collaris*. Later, TAYLOR (1965, pp. 699-701) redescribed it as deserving of specific rank "Since the two forms (*triangularis* and *collaris*) are found together through a wide range."

MALCOM SMITH (1943, p. 278) has observed *triangularis*, stating: "Specimens (of *collaris*) from Siam and Annam may have a lateral series of yellow spots on scale-rows 4 or 5, and the yellow border on the nape may be chevron-shaped, the apex pointing backwards."

Besides *Sibynophis triangularis*, the genus *Sibynophis* in Thailand is represented by two other species, namely, *S. collaris* (GRAY), and *S. melanocephalus* GRAY. Of these, *triangularis* is probably most closely related to *collaris*. It differs from the latter in having the black nuchal band reduced to a triangle bordered on two sides by cream or white lines 1-1 1/2 scales wide (which may or may not be continuous with the cream or white lines on the labials), and in having a series of cream or yellow spots chiefly on the 4th scale row.

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