CHECK LIST OF TRINIDAD SNAKES by Hans Boos (Emperor Valley Zoo, Port of Spain).

Since Emsley (1963, Copeia No. 3, Sept. 25, pp. 576-577.) published 'A Consideration of the List of Snakes Recorded from Trinidad' a complete listing of the Snakes of Trinidad with literature references has not been made.

Herewith is given such a list, based on the most recent available literature. Wherever necessary, notes have been added.

Family: Typhlopidae.

- 1. Typhlops trinitatus Richmond
 - 1963 Typhlops sp. Emsley, Copeia No. 3: 576.
 - 1965 Typhlops trinitatus Richmond, Proc. Biol. Soc. Washington, 78:121, fig. 1

Family: Leptotyphlopidae.

 Leptotyphlops goudotii goudotii (Dumeril and Bibron), new combination. Note: This Leptotyphlops was considered to be the species albifrons by Wehekind (Trinidad Snakes-Roy. Vic. Inst. Mus. Trinidad, Misc. Pap. No. 1:1-8, reprinted in J. Brit. Guiana Mus. and Zool. No. 27) who quoted Mole's 'The Snakes of Trinidad' (Port-of-Spain Gazette, 1926) who had quoted Boulenger (1896, Cat. Snakes Brit. Mus.) who listed it as Glauconia albifrons (Wagler). When Wehekind published 'Notes on the Food of the Trinidad Snakes' (1955, Brit. J. Herpet, 2:9-13) he used Leptotyphlops tenella (L. albifrons).

In the review of the Genus by Braulio Orejas-Miranda of the Museo Nacional de Uruguay (Catalogue of Neotropical Squamata, Part I. Snakes, J. A. Peters and B. Orejas-Miranda, Smithonian Inst. Press 1970.) the difference between the above species and the following is the presence or absence of contact between the supraocular and supralabial scales.

2A Leptotyphlops tenelia Klauber

1939 Leptotyphlops tenella Klauber, Trans. San Diego Soc. Nat. Hist., 9:59, figs 1a-1b. Family: Boidae.

3. Bos constrictor constrictor Linnaeus

1960 Boa constrictor constrictor-Forcart, Herpetologica, 7: 199.

4. Corallus enydris cookii Gray

1951 Corallus enydris cookii- Forcart, Herpertologica, 7: 197.

5. Epicrates cenchria maurus Gray

1935 Epicrates cenchria maurus Stull, Pro. Boston Soc. Nat. Hist., 40:396.

6. Eunectes murinus gigas (Latrielle)

1936 (Eunectes murinus) gigas- Dunn and Conant, Proc. Acad. Nat. Sci. Phila., 88: 503.

Family: Colubridae.

Subfamily: Colubrinae-(Aglypha)

7. Helicops angulatus (Linnaeus)

1830 Helicops angulatus-Wagler, Nat. Syst. Amphib.: 171.

8. Ninia atrata (Hallowell)

1860 Ninia atrata-Cope, Proc. Acad. Nat. Sci. Phila., 1860:340.

 Mastigodryas boddaerti dunni (Stuart), new combination.
 1941 Mastigodryas boddaerti dunni-Stuart, Misc. Bull. Mus. Zool. Univ. Mich., 49:76, pl. 3, fig. 6.

> Note: This is the snake listed by Wehekind, quoting Mole, and Boulenger who called it Drymobius boddaerti Sentz. The present listing for Trinidad given above is in fact one for Tobago. (1933 Stuart, Occ. Pap. Mus. Zool. Univ. Mich., 254:5). In the most recent listing of Neotropical Squamata there is no specific listing of either the Genus Mastigodryas or Drymobius on Trinidad. The description in the key given for the differentiation of the subspecies dunni and boddaerti, says that the Tobago form. dunni, has two lateral light stripes while boddaerti, not stated to be specifically found on Trinidad, has a single lateral stripe, which is a characteristic of the snakes seen on Trinidad. The position as to what this snake found on Trinidad really is, is further confused by a listing of Mastigodryas amarali (Stuart) as coming from Tobago as well (1970 Catalogue of Neotropical Squamata, Part 1, p. 191.)

and whose description also conforms to the appearance of the Trinidad form. It is also stated that **M. amarali** is found on Magarita Island north of the Venezuelan mainland.

To further cloud the issue, a species and subspecies of the Genus Drymobius, called margaritiferus margaritiferus (Schlegel) (named for Margarita Island?) is listed as coming from "along Caribbean Coast to northern South America" This distribution could include the Island of Margarita, as is suggested by the name, as well as the island of Trinidad, which again is not listed specifically for any of these snakes, The description of D. m. margaritiferus as having, "dorsal pattern reticulate, each scale green surrounded by black" exactly fits the appearance of specimens of this snake known as "Machette Couresse" found by this writer on the islands of Heuvos and Chacachacare between Trinidad and Venezuela. Mole (1926 Snakes of Trinidad) states that it is also found on Gasparee (Gaspar Grande) Island. Thus, until some clarification is made, and in the absence of a specific listing of either Drymobius or Mastigodryas for Trinidad. it is suggested the one above be accepted.

10 Pseustes sulphureus sulphureus (Wagler)

1937 Pseustes sulphureus sulphureus-Brongersma, Zool. Meded., 2016, figs. 1a-b.

- Pseustes poecilonotus polylepis (Peters)
 1937 Pseustes(poecilonotus polylepsis)-Brongersma, Zool. Meded., 20:6.
- Spilotes pullatus pullatus (Linnaeus)
 1929 Spilotes pullatus pullatus-Amaral, Mem. Inst. Butantan, 4:277, fig. 1.
- 13. Drymarchon corais corais (Boie)

Note: None of the recent listings or keys for this snake, known in Trinidad as the "Yellow-Tail Cribo", take into consideration or acknowledge its distinctive colouration that gives it its name. Drymarchon corais corais, having a dirty yellow or orange tail, has not been specifically described or attributed to Trinidad. Beebe (1946, Zoologica, 31:27) describes this "Yellow-Tail Cribo" from Guyana and Venezuela. The Genus Drymarchon was first used by Fitzinger in 1843 and the species corais by Boie in 1827 when he described Coluber corais as coming from "America".

14. Chironius carinatus (Linnaeus)

1922 Chironius carinatus- Ruthven, Misc. Publ. Mus. Zool. Univ. Mich., 8.65.

15. Leptophis abaetulla coeruleodorsus Oliver

1958 Leptophis ahaetulla (coeruleodorsus)-Int. Comm. Zool. Nomen., Op. 524:270.

16. Leptophis riveti Despax

Note: Oliver (1948 Bull. Amer. Mus. Nat. Hist., 92:250, figs. 4–5.) describes this as **Thalerophis riveti** using the old name for the Genus. Emsley (Copcia 1963) lists Leptophis reveti. This spelling error is hereby noted. Emsley suggests that riveti may in fact be from Tobago, and not from Trinidad.

17. Leimadophis melanotus (Shaw)

1929 Leimadophis melanotus (Amral, Mem. Inst. Butantan. 4:166. 1966 Leimadophis melanotus Roze, Orfidios deVenezuela: 159, fig. 38.

Leimadophis reginae reginae (Linnaeus) 1935 Leimadophis reginae (reginae)-Amaral, Men. Inst. Butantan, 9:238.

19. Liophis cobeila (Linnaeus)

1925 Liophis cobella-Amaral, Proc. U.S. Nat. Mus., 67 (24):7.

- Hydrops triangularis neglectus Roze
 1957 Hydrops triangularis neglectus Roze, Acta. Biol. Venezuelica. 2:78, fig. 13c.
- Atractus trilineatus Wagler
 1828 Atractus trilineatus Wagler, Isis von Oken, 21:742, pl. 10 figs. 1 – 4.

22. Erythrolamprus aesculapii aesculapii (Linnaeus) 1863 Erythrolamprus Aesculapii (Aesculapii)- Jan, Arch. Zool. Anat. Fis., 2:314. Note: Though it is not specifically stated in the most recent

list of South American Snakes that the subspecies **aesculapii** comes from Trinidad, the species **aesculapii** is listed for Trinidad (Emsley. Copeia 1963) as differing from **aesculapii** (ocellatus) found on Tobago. The form on Trinidad is very different from the one from Tobago in colour pattern, and whatever physical differences that there are, may be soon resolved. The only specimen of this snake found on Trinidad was recently sent to Prof. Robert Mertens for his appraisal of its status.

Family: Colubridae.

Subfamily: Boiginae-(Opisthoglypha)

23. Tantilla melanocephala melanocephala (Linnaeus)

1943 Tantilla melanocephala melanocephala Schmidt and Walker, Zool. Ser. Field Mus. Nat. Hist., 24:318.

24. Siphlophis cervinus (Laurenti)

1964 Siphlophis cirvinus Hoge, Mem. Inst. Butantan, 30 (1960-62):43.

Note: This snake should be considered rare. It has not been collected since 1925 (Mole). This was on Ortinola Estate. Maracas Valley.

25. Tripannurgos compressus (Daudin)

1896 Trypannurgos compressus-Boulenger, Cat. Sn. Brit. Mus., 3:58.

26. Imantodes cenchoa cenchoa Linnaeus

1942 (Imantodes cenchoa) cenchoa-Smith, Proc. U.S. Nat. Mus., 92:348.

27. Leptodeira annulata ashmeadi (Hallowell)

1958 Leptodeira annulata ashmeadi-Duellman, Bull. Amer. Mus. Nat. Hist., 114:43.

Note: The characteristics used to put the Trinidad form of **Leptodeira** into the above subspecies seem so variable, that it is my opinion that this matter is far from settled.

28. Oxyrhopus petola petola (Linnaeus)

1946 Oxyrhopus petola petola-Beebe, Zoologica, 31:37.

Clelia clelia (Daudin)
 1944 Clelia clelia clelia Dunn, Caldasia, 3 (12):201.

 Pseudoboa neuwiedii (Dumeril, Bibron and Dumeril)
 1901 Pseudoboa neuwiedii-Stejneger, Proc. U.S. Nat. Mus., 24:189.

31. Oxybelis aeneus (Wagler)

1830 (Oxybelis) aeneus-Wagler, Nat. Syst. Amphib. 183. Note: Emsley (Copeia, 1963) seems to retain in the list the species Oxybelis fulgidus from Trinidad solely because 'Patos Island which was administratively part of Trinidad until 1942'. He does not make his point clear. Patos Island was handed back to Venezuela on Sept. 29, 1942. Thus Oxybelis fulgidus, found there, and never collected on Trinidad, should no longer he included in the list of Trinidad Snakes.

Faintly: Dipsadinae.

32. Dipsas variegata trinitatis Parker

1960 Dipsas variegata trinitatis Peters, Misc. Publ. Mus. Zool, Univ. Mich., 114:139.

33. Sibon nebulata nebulata (Linnaeus)

1960 Sibon nebulata nebulata-Peters, Misc. Publ. Mus. Zoo. Univ. Mich., 114:199.

Family: Elapidae.

- Micrurus leminiscatus diutius Burger
 1955 Micrurus lemniscatus diutius Burger, Bol. Mus. Cien. Nat., Caracas. 1:8.
- Micrurus psyches circinalis (Dumeril, Bibron and Dumeril) 1967 Micrurus psyches circinalis-Roze, Amer. Mus. Novitates, 2287:40.

Family: Viperidae.

Subfamily: Crotalinae.

- Bothrops atrox (Linnaeus)
 1758 Coluber antrox Linnaeus, Systema Naturae, Ed. 10:222
- 37. Lachesis muta muta (Linnaeus)

1951 Lachesis muta muta Taylor, Univ. Kansas Sci. Bull. 34:184.

Note: In the "Catalogue of the Neotropical Squamata: Part I. Snakes" there is a listing for Trinidad as follows:-

Family: Anomalapididae.

Typhlophis squamosus (Schlegel)

1893 Typhlophis squamosus – Boulenger, Cat. Sn. Brit. Mus., 1:57. This is the first indication in any list, that either this Family of Genus is to be found on Trinidad. A search in the reference literature, which is not readily available, for the origin of this listing will have to be conducted and verification that a specimen from Trinidad island does exist must be produced before consideration can be given to including this species in the list of the Snakes of Trinidad.

REPORT ON THE EFFECT OF THE VENOM OF THE COLUBRID SNAKE THE 'RATONEL' PSEUDOBOA NEUWIEDII

by Hans Boos

(Emperor Valley Zoo, Port-of-Spain).

The Ratonel or Ratonero, **Pseudoboa** neuweidii is a fairly common snake in Trinidad. The young are distinctly marked, being bright pink or red on the body, having a dark brown or black head, and there is a collar of dirty-white or yellow separating the head and body colours. The belly is white. In the adult, the colours fade to a pinkish-brown on the body with a dark brown head. The pale collar is missing.

It belongs to'a group of the Colubrids, the Boiginae, which are known to have some degree of venom which is delivered from modified, enlarged, grooved teeth situated in the back of the upper jaw.

Very little is known of the amount of venom these snakes can inject in a bite or the effect on animals other than the usual prey.

The Ratonel as well as the Cat-Eyed Night Snake, Leptodeira annulata and the Horse Whip, Oxybelis aeneus, immobilize their prey quite quickly by using their venom. The lizards of the Genus Anolis are killed within 30-60 seconds by the venom.

To effect a venomous bite, these back-fanged snakes, the Opisthoglyphs, seize their prey and begin to swallow immediately, then bringing the enlarged teeth into play, they inject venom. The struggles of the lizard are seen to cease within seconds of this bite. In my experience, bites on the fingers of humans caused an itching sensation. It is fairly certain in these cases that the back-fangs were used, as in one instance, the whole of the index finger was swallowed by the rapid feeding habits of the Ratonel.

There have been human deaths caused by back-fanged snakes. The famous herpetologist, Dr. Karl Schmidt was bitten by the African Boomslang, Dispholidus typus and died. The East African Vine Snake, Thelotornis kirtlandi is known to be capable of killing a man.

An indication of the potency of the venom of the Ratonel, and thereby of two of its closest relatives in Trinidad, the Black Cribo, Clelia clelia, and the False Coral, Oxyrhopus petola, is suggested by the following events.

Mr. Charlie Forde of Cutucupano Road, La Pastora, Santa Cruz, reported to me that at 2.00 a.m., on the morning of the 23rd April, 1974, the noise of a cat in distress woke him. He investigated and saw that there was a snake in his yard with its head through the one-inch mesh wire fence, biting into the neck of the neighbour's cat in the yard next door. The cat was "squawling" and was pulled up against the wire by the strength of the snake's grip. The snake was alive and was seen to be writhing about. He did not interfere with the animals and went back to bed. The noise of the cat continued for some time and then stopped.

In the morning, in the drain on his side of the fence was the snake he had seen the night before. It was dead. On the other side of the fence was the cat, also dead.

I examined and identified the snake as a Ratonel, Pseudoboa neuweldli. It was $37\frac{1}{2}$ inches long. There was clotted blood obscuring the teeth rows in the upper as well as the lower jaw.

There was a series of holes 2 inches behind the head in a pattern conforming to the placing of the canines of a large house cat. There were three holes in an arc over the dorsal surface, the pivotal point being another single hole an inch anterior to the other three. These had pierced the body cavity of the snake.

There were several more punctures in pairs conforming to the bite of a cat, in locations along the rest of the body. These also had punctured the body cavity. Autopsy of the snake showed blood in the body cavity from several punctures, one being in the heart. The cat was not available for examination.

A reconstruction of what might have happened is given here, using the evidence given by Mr. Forde, and the condition of the snake.