

VENOMOUS PIT VIPERS OF TRINIDAD
by Laurence “Snakeman” Pierre



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**A MAPEIRE BALSAIN / FER-DE- LANCE COUGHT AND CONTROLLED
BY LAWRENCE PIERRE BETTER KNOWN AS SNAKE MAN**

PART 1

The Poisonous Types of Snakes

How many types of poisonous snakes are there in Trinidad and Tobago?

There are more than sixty species of snakes in Trinidad and Tobago. Trinidad has four venomous species. There are no venomous snakes in Tobago.

What are the venomous snakes of Trinidad?

The four species are the two Coral and the two Mapepire Snakes.

Coral Snakes

Large Coral – *Micrurus lemniscatus diutius*

Small Coral – *Micrurus circinalis*

Mapepire Snakes

Bushmaster aka Mapepire z'anana *Lachesis muta muta*

Fer-de-lance aka Mapepire balsain *Bothrops atrox*

Coral snakes are usually easily recognized by their red, yellow/white, and black coloured banding. However, several nonvenomous species – including the False Coral - have similar colouration! Some persons may have been taught that "Red on yellow, kill a fellow; red on black, poison lack". This is not true for the Trinidad species. Both banding patterns are poisonous.

The mapipire have two elongated, upper maxillary teeth (fang), which can be unfolded from their resting position against the roof of the mouth, to their biting position, where they are almost perpendicular to the upper jaw. Each fang is shed periodically and is replaced by the first reserve fang. They have a deep, easily identifiable pit between the eye and the nostril. (The pit is a heat sensing device that aids in detecting warm-blooded prey at night.) Colour and pattern are deceptive criteria for identification and should only be used by the very knowledgeable.



MAPEIRE BALSAIN / FER- DE- LANCE SHOWING VENOM

PART 2

What are some of the types of treatments

What First-Aid treatment can be used for snake bites?

Unless the snake has been positively identified as being non-venomous, all snake bites are medical emergencies and the victim should be immediately transported to the nearest health-care facility.

In circumstances where a long time may pass before the victim can seek help from a healthcare professional: The first thing one must be capable of doing when someone has been bitten is

- You must be able to identify the type of snake.
- Keep the patient as calm as possible.
- Apply dressing if bleeding.
- Immobilize the affected limb at or below the level of the heart.
- A tourniquet or constricting bands should be applied to the bitten limb, between the wound and the heart. The band should be at least an inch (2 – 3 cm) wide and slack enough for a finger to be passed between the wound and the limb. (If the tourniquet is too tight, the venom may be trapped and cause tissue damage and necrosis – tissue death).
- Transport to the nearest health-care facility.



**THE VENOM OF A MAPEPIRE BALSAIN/ FER-DE- LANCE
BEING EXTRACTED BY LAWRENCE PIERRE SNAKE MAN.**

PART 3

What are some of the types of treatments that are NOT advised

- Cutting of the wound and sucking out the venom is never recommended. (This has not been shown to have any benefit and it can increase the effect of infection or damage. Additionally, the mapepire's fang can be over an inch (2.5 cm) long. An incision, by an untrained person, to this depth can result in life threatening injury. Persons sucking out venom, who have open wounds in their mouths may also be envenomated.)
- Alcohol should not be used. (Alcohol increases blood flow in the extremities and will help to spread the poison.)
- Eating dirt and/or ingesting a mixture of mud and water are of no proven benefit.



A MAPEPIRE BALSAIN/ FER-DE- LANCE IN WHICH VENOM IS TO BE EXTRACTED BY LAWRENCE PIERRE SNAKE MAN

PART 4

What is the timeframe after which the poison takes effect?

The time between being bitten and the development of signs of poisoning depends on a number of factors, including:

- The nature, location, depth and number of bites
- Amount of venom / poison administered by the snake
- The species and size of the snake
- The age and size of the victim
- The general health of the victim (before the snake bite)
- The victim's sensitivity to the venom (for example change of behavioral pattern)

I have heard that treatment of venomous snakebites require the use of antivenom. Where in Trinidad is this available?

Not all snakebites will require antivenom treatment. There are instances when the bite may be 'dry' (no envenomation). However, The Ministry of Health imports both coral and mapipire antivenom and makes it available to the public at all major Government hospitals in Trinidad.

Is there any scientific validity to some of the more popular 'sayings' about snakes and snakebites?

- If after biting its victim, the snake gets to water before the victim, the victim will surely die. There is no evidence whatsoever to support this.
- Snakes get their poison by eating frogs / crapauds. Venomous snakes are born with venom / poison in special sacs from which it goes to the fangs. In fact very young snakes can be even deadlier than mature venomous snakes. This is because the mature snake limits the release of venom as warranted by the particular situation (e.g.size of prey), but the young snake invariably release the entire content of their venom stores - until such time as they have learned this control.



CASCABEL PREPARING TO EAT A MOUSE

PART 5

Contact places in Trinidad on more information about PIT VIPER BITES

Where can I obtain additional information about snakebites?

National Poison Centre

The University of the West Indies
Faculty of Medical Sciences
Eric Williams Medical Sciences Complex
Champs Fleurs
Director: Dr. Verrol Simmons
Tel: 800 2742
Fax: 645 7428
Email: Poison.Centre@sta.uwi.edu

The Eastern Regional Health Authority Poison Information Centre

Sangre Grande District Hospital
Ojoe Road
Sangre Grande
Director: Ms. Angelie Lochan
Tel: 800 2742
Fax: 668 4741
Email: pic@erha.co.tt

PART 6

Various snakes in Trinidad

BOA CONSTRICTOR / MACAJUEL



The Boa Constrictor (*Boa constrictor*) is a large, heavy-bodied species of snake. It is a member of the family Boidae found in North, Central, and South America, as well as some islands in the Caribbean. A staple of private collections and public displays, its color pattern is highly variable yet distinctive. Ten subspecies are currently recognized, although some of these are controversial. This article focuses on the species *Boa constrictor* as a whole, but also specifically on the nominate subspecies *Boa constrictor*.

CASCABEL



All members of this genus are long, slightly flattened laterally and have thin bodies with large heads. They typically have relatively large eyes, although this is less pronounced in the larger species, such as the emerald tree boa, *Corallus caninus*. The anterior teeth are highly elongated, often being several times the length one would expect for snakes of their size. These are used for penetrating layers of feathers to get a firm grip on birds, their primary prey. All members of the genus are nocturnal and have large numbers of very pronounced thermoreceptive pits located between the labial scales.

RAINBOW BOA CONSTRICTOR



Despite requiring very specific humidity and heat this species is commonly found in the pet trade. During the 1980s and early 1990s, substantial numbers were exported from Suriname. Today, however, far fewer are exported and most offered for sale are captive bred.^[3] Due to their requirements of high humidity in a captive environment they should be considered of intermediate difficulty for snake owners, but once these requirements have been met they generally thrive in captivity. Younger specimens will often bite, but tend to calm down as they become more used to handling.

ANACONDA



An anaconda is a large, non-venomous snake found in tropical South America. Although the name actually applies to a group of snakes, it is often used to refer only to one species in particular, the common or green anaconda, *Eunectes murinus*, which is one of the largest snakes in the world.

BLACK CRIBO



The mussurana or musurana (Portuguese *muçurana*) are six species of oviparous colubridsnakes belonging to the genus *Clelia*. They are distributed from Guatemala to Brazil. They specialize in ophiophagy, i.e., they attack and eat other snakes. They have other popular names in various countries, such as *zopilota* in Central America and *cribo* on someCaribbean islands (though they are not related to *Drymarchon*).

FALSE CORAL



***Erythrolamprus aesculapii*, the False Coral,** is a snake found in Amazonian South America and on the island of Trinidad (in the Republic of Trinidad and Tobago). It feeds mainly on other snakes and is often found in the leaf litter or burrowing in the soil in rain forests. This snake is mildly venomous. It has been falsely reported that it gains some protection from predators through its mimicry of coral snakes. In fact, it is a model for the coral snake and the coral snake is the mimic.

COMMON CORAL



Coral Snakes vary widely in their behavior, but most are very elusive, fossorial snakes which spend the vast majority of their time buried beneath the ground or in the leaf litter of a rainforest floor, only coming to the surface while raining or during breeding season. Some species, like *Micrurus surinamensis* are almost entirely aquatic and spend most of their lives in slow-moving bodies of water that have dense vegetation.

MAPEPIRE BUSHMASTER/ZANNANA



***Tripanurgos compressus*, the Mapepire Zannana/Bushmaster** is a snake found in tropical South America and Trinidad and Tobago. It feeds on small lizards and probably on frogs and nestling birds.

MACHETE



Chironius carinatus, the Machete Savane, is a very large, but slender snake (reportedly up to 3 m [9.8 feet] in length) found in the Guianas, northern Brazil to Costa Rica, eastern Venezuela and Trinidad and Tobago. It feeds on frogs, mice and birds. Although nonvenomous, this snake is well known for its aggressive behaviour.

Body color can range from brown to deep yellow or gold, with the tail being generally darker than the body. The belly is often a bright shade of yellow or orange. In most specimens, body scales have lightly colored centers with darker edges. A light colored stripe runs down the length of the body, fading at the tail. The dorsal scales are in 12 rows.

MAPEPIRE Balsain / Fer-de-lance



Although generally terrestrial, it is also an excellent swimmer and even climbs trees when necessary to reach prey. Generally nocturnal, but may forage at any time of the day if necessary. These snakes are also easily agitated. These

snakes are known to search for rodents in coffee and banana plantations. Workers there are often bitten by the snakes, which can lie camouflaged for hours, nearly undetectable, and strike with high speed.

Their venom consists mostly of Hemotoxin. Presently, treatment is usually possible if the victim receives medical attention soon enough. Venom yield averages 124 mg, although it may be as much as 342 mg.

Commonly, bites from this snake to humans cause symptoms including nausea, blackouts, and paralysis. In almost all cases, temporary or sometimes permanent loss of local or 'short term' memory were reported. Extended hospital stays, as well as weight loss of up to fifteen pounds have been reported.

TIGER SNAKE



Spilotes pullatus, also known as the Tigre, is a large (up to 3 m) snake found in southern Central America, northern South America and Trinidad and Tobago. It is a non-venomous colubrid that tends to inhabit forested areas. It is arboreal in habit and feeds on a wide variety of prey, including small mammals, birds and lizards.
