

Snakes of Butantan *coloring book*



Butantan Institute

In 1899, The Butantan Institute was a coffee farm known simply as the Butantan Farm. Here, Minas Gerais physician Vital Brazil, a public health scholar and the first director of Butantan, had a mission to combat the Bubonic Plague that was coming from Europe and spreading through Brazil. The laboratory created for this purpose was recognized as an institution in 1901 when the "Instituto Serumtherapico" was officially created, and later came to be called the Butantan Institute.

Vital Brazil's main interest as a scientist was to find a way to treat snake bites, a major public health problem. To research ways to produce an effective serum, the doctor needed many snakes to extract their venom. He then thought of an ingenious way to get these animals: he asked farmers and residents from all over the state and other parts of Brazil to send snakes to Butantan so they could be studied. At the same time, he realized the importance of sharing the results of his research with society, both to prove to everyone that antivenom serum was the best treatment for snake bites, and to teach people how to avoid these accidents. Through their research with the hundreds of snakes sent to the Butantan Institute, Vital Brazil was able to discover the best way to manufacture the serum, and still prove to the world that different types of serums are needed to treat snakebites belonging to different groups.

Currently, Butantan is a major producer of antivenom serums and vaccines, as well as a research center. The scientists who work here develop research on various topics, such as poisonous animals, bacteria and viruses.



The area that constituted the farm is now covered by a forest that houses many species of plants and various wild animals such as birds, bats, opossums, lizards, frogs, spiders and many insects. Butantan researchers study these animals and plants in the park to better understand and maintain this important area for urban biodiversity.

The Biological Museum of the Butantan Institute had its origin in 1912, from the collection used by Vital Brazil to give lectures and courses to the public. Since this time, their exhibits have brought visitors information about animals, especially snakes. Together with the exhibitions, the activities that the Biological Museum offers the public seek to bring together people and biodiversity, and understand it a little more. Knowledge about our flora and fauna, and its conservation, are closely linked to maintaining the health of the population, one of the main missions of the Butantan Institute.

Biological Museum

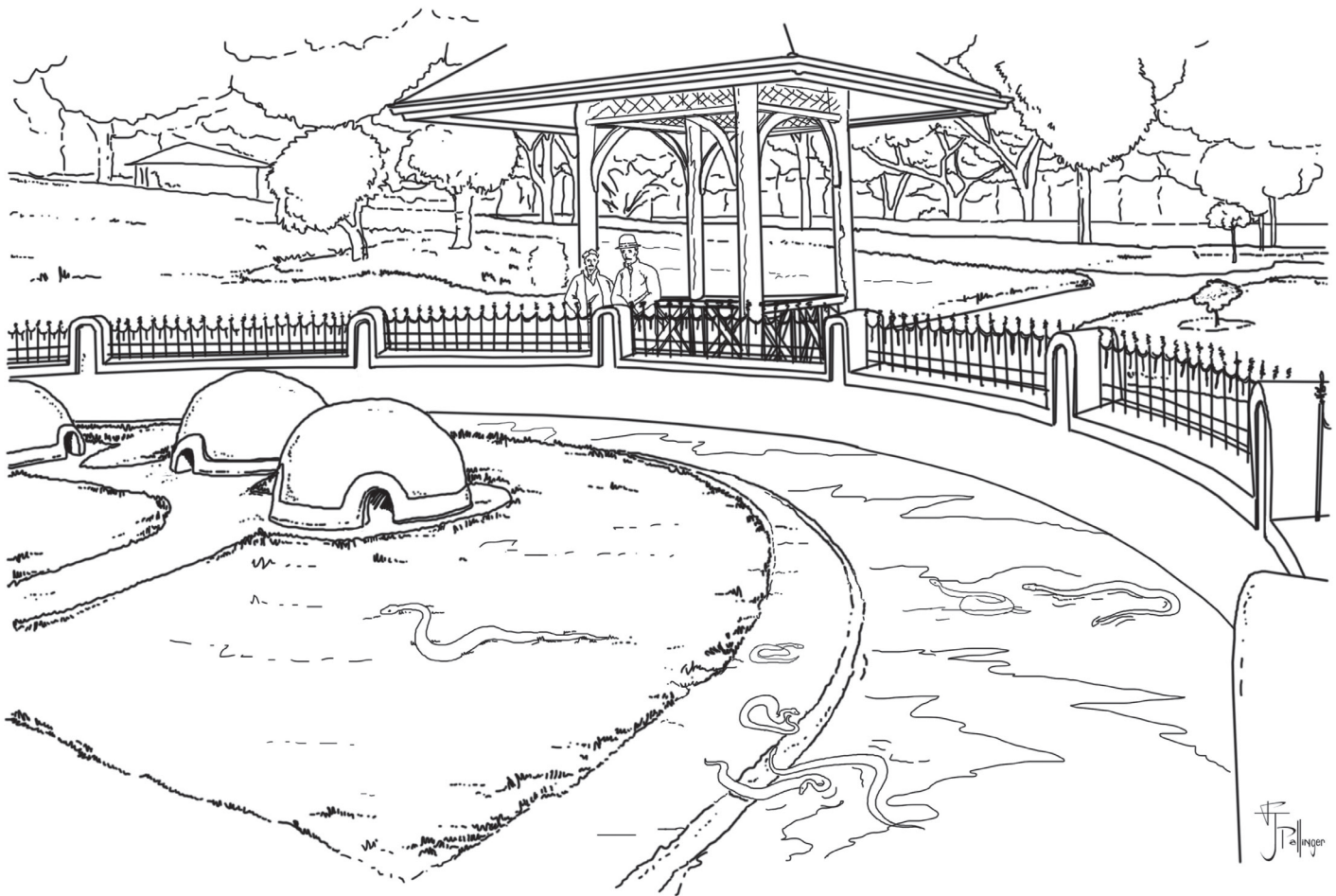


After occupying different rooms and buildings of the Butantan Institute, since the 60's the Biological Museum is located in the old stable that housed the horses used in the process of manufacturing the antivenom serum.

The exhibit shows animals of the Brazilian fauna and exotic animals, especially venomous and non-venomous snakes, but also spiders, frogs, lizards, scorpions and insects.

One of the goals of presenting these animals to visitors is to show how they can be fascinating and diverse, and to point out their fundamental role in the environment in which they live.

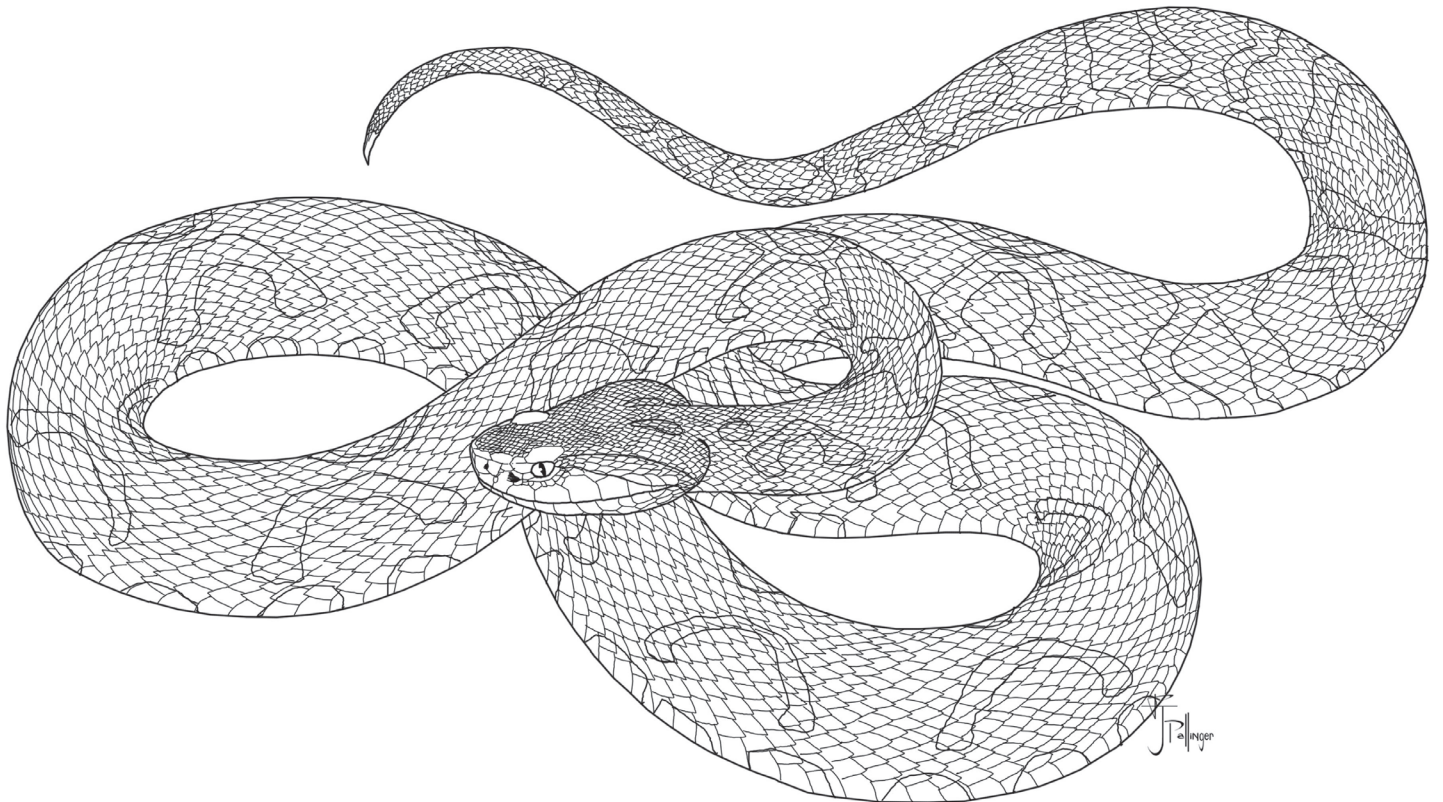
Serpentary



The large number of snakes that came to Butantan, as well as the demonstrations and snake shows Vital Brazil made to the public, led to the construction of a place to house the animals, that they might be kept for the extraction of poison and seen by visitors. This place is now known as the Serpentarium. In the first 20 years after its founding, the Institute became internationally famous as the "Butantan Snake Farm" because of the activities that took place there.

Nowadays, the serpentarium is the place where people have the possibility to observe some snakes in an open environment, closer than it would be if they were in nature. In addition, The Serpentarium is also used for scientific research.

Pit viper *Bothrops jararaca*



The pit viper is a common snake in the Atlantic Rainforest. It can be identified by the presence of an orifice near the nostrils, called the loreal pit, and by the pattern of triangular spots throughout the body. It is a nocturnal animal which can be found on the ground and sometimes also on trees. The hatchlings of the pit viper feed on small amphibians and lizards and the adults feed on small mammals, mainly rodents. Pit vipers are poisonous and can be aggressive. They are responsible for most accidents involving humans.

Rainbow boa

Epicrateres cenchria



This snake is from the same family as the jiboias and sucuris. It is commonly known as salamanta, but also can be called rainbow boa, since its scales emit a colored glow in the light of the sun. It is a terrestrial snake, it is more active at nighttime and it preys on birds and mammals. Since it has no venom, its prey is captured with a bite and immobilized by pressure from its own body, a method called constriction.

Goo eater

Sibynomorphus

mikanii

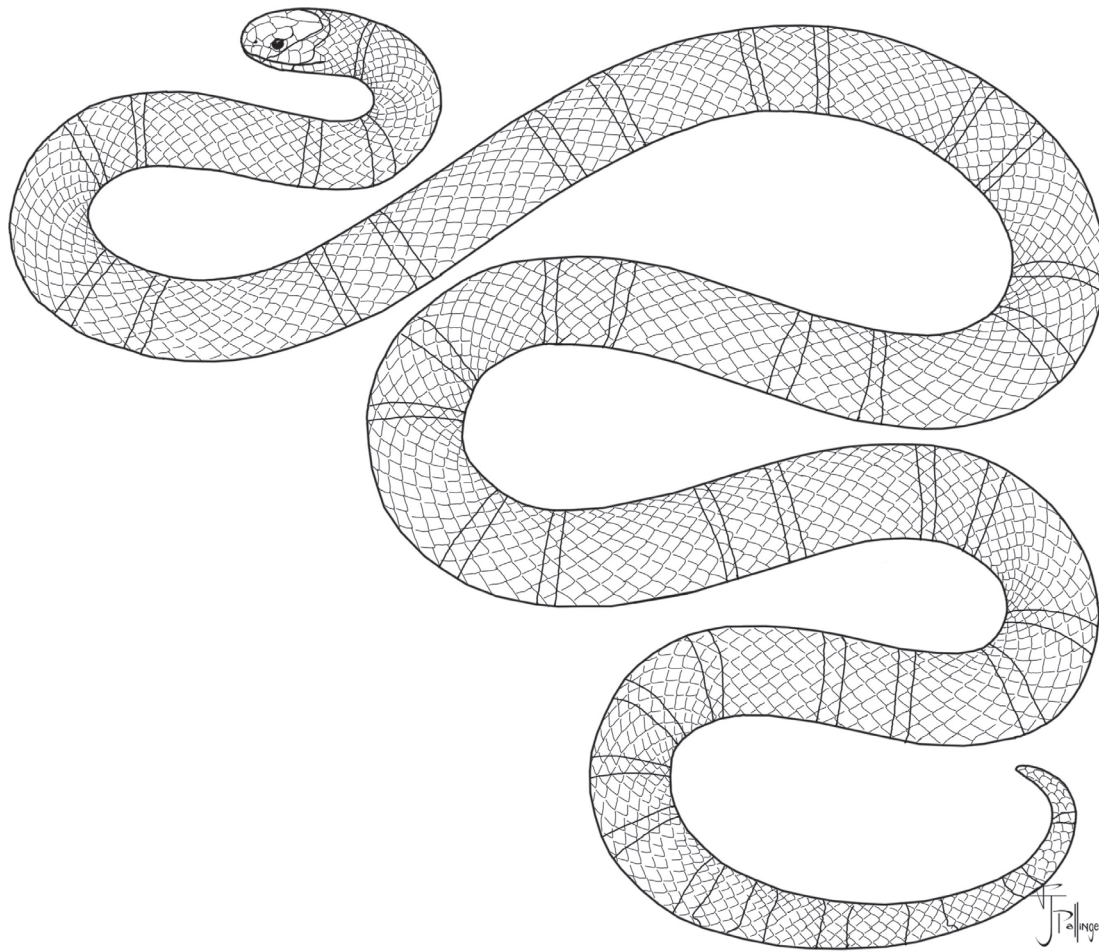


The goo eater is a small, terrestrial snake with nocturnal habits and harmless to humans. It feeds on slugs and snails, so it can often be found in vegetable gardens where these small invertebrates are common. It has no venom, and instead has some specializations in its skull and jaws which allow it to pull the mollusk out of the shell without breaking it.

Coral snake

Micrurus

corallinus



Easily identified by its colorful ring pattern, the coral snake is a snake that spends most of its life under dead leaves and trunks on the forest floor. It is very common in Brazil, and feeds on other snakes, or animals with an elongated body, such as amphisbaenians (worm lizards) and cecilians (legless amphibians). There are many species of coral snakes and also of the so-called "false-corals" which are harmless to humans.

True corals are very poisonous and can cause accidents. Although they are extremely poisonous, corals are not aggressive and cause few accidents.

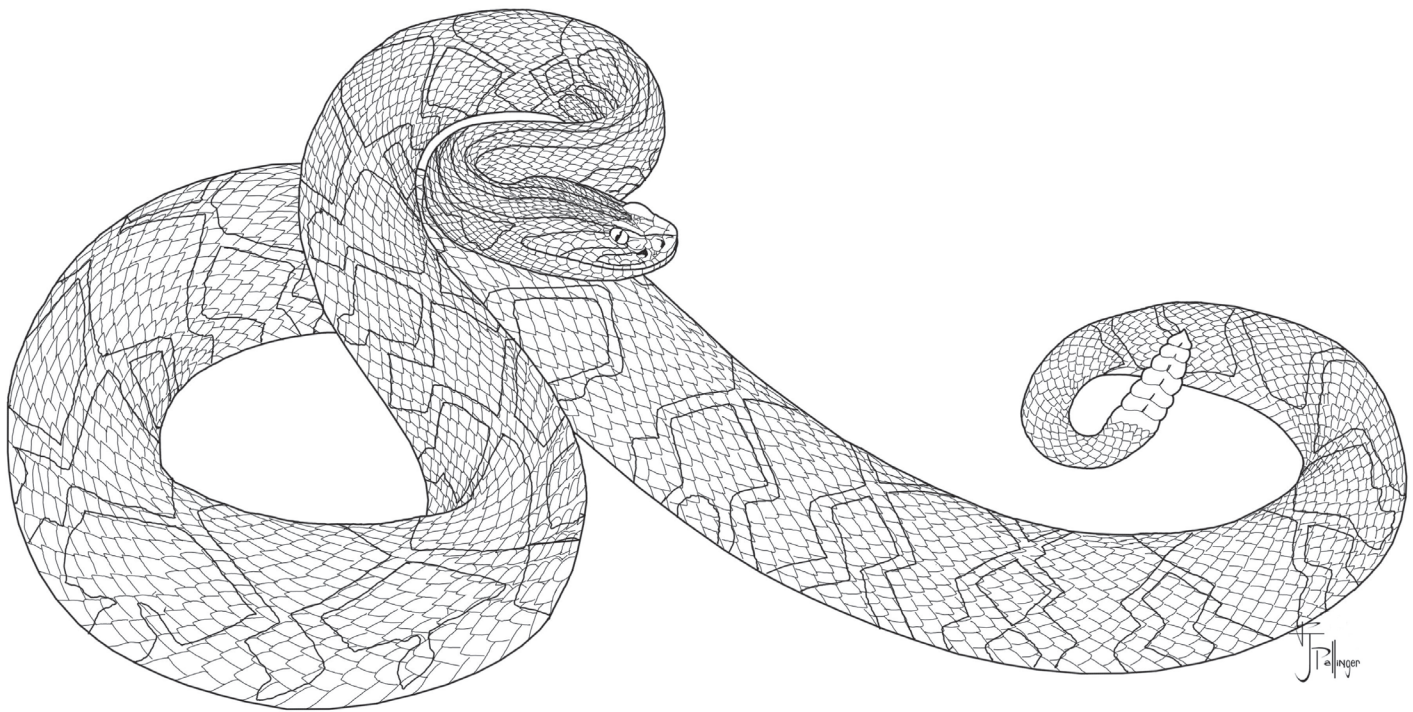
South American green racer *Philodryas olfersii*



There are many green snakes in the wild, and they are all popularly known by this name. However they can be quite different species. This snake is very common in several places in Brazil, and although not dangerous as the jararaca or rattlesnake, it has poison and can cause accidents. It can be found in soil or trees, and its activity is mainly diurnal (during the day). It can eat various types of small animals such as frogs, lizards, and small mammals.

Rattlesnake

Crotalus durissus

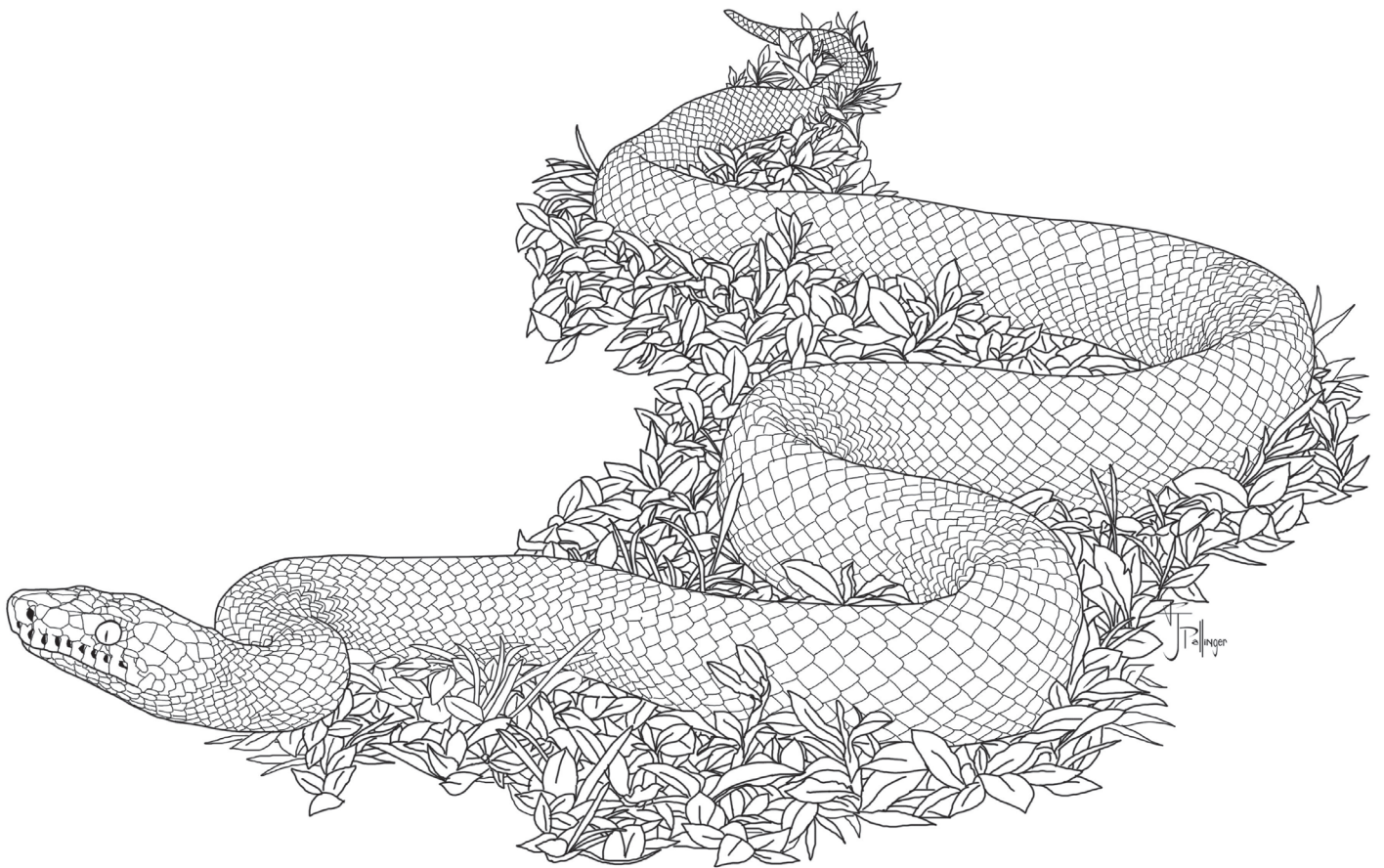


The cascavel is easily recognized in the open fields where it lives, due to the presence of a rattle at the tip of the tail. Contrary to popular belief, the rattle has no venom and its function is associated with the animal's defensive behavior. When the snake feels threatened, it shakes the rattle to warn the possible enemy that it is there and can attack! The rattle rings do not indicate its age, but how many times the snake had shedded its skin. Rattlesnakes are venomous and cause many accidents in Brazil. They

are common in open environments, such as pastures and fields, and had increased the distribution in response to deforestation. The rattlesnake is nocturnal and feed on small mammals, mainly rodents.

Cropan's tree boa

Corallus croppani



Only six of these boas have been seen to this day, making it the most mysterious and rare species of boa in the world. As far as we know, it only exists in the Ribeira Valley, in the state of São Paulo. The first specimen was described in 1954 by a researcher at the Butantan Institute, and many years went by until other snakes of this species appeared. This beautiful boa has been found alive for the first time just recently and now scientists will study it in nature to learn where and how it lives. Like all boas,

Cropan's tree boa is not poisonous, and captures its prey using constriction. It is considered an endangered species and therefore worth being protected. To do this, we need not only to learn more about its habits, but also preserve the Atlantic Forest region where it is found.

Green vine snake

Oxybelis fulgidus



Green vine snakes, also called flatbread snakes, are arboreal snakes that spend most of their lives in trees. These snakes exhibit a wide variety of shapes and colors, and although this species is green, there are gray and brown species, all of which mimic the color of tree branches. This snake has an interesting trait, a long snout that gave rise to its Portuguese name (bicuda). The specialized snout is an adaptation to tree life, it helps in catching prey, especially nimble animals such as birds and lizards. In addition, the green

vine snake has an elongated body, which facilitates climbing branches. This species is rare in nature and is not considered venomous to humans.

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