

Blood Python

Python brongersmai

Class: Reptilia **Order:** Squamata **Suborder:** Serpentes **Family:** Boidae

Other names: Red blood python, Brongersma's short-tailed python, blood python, red short-tailed python

Other related species: *P. c. brongersmai* & *P. c. breitensteini* were both originally listed as subspecies of *P. curtus*, but were elevated to species status in 2000 and 2001, respectively [1].

Zoo Blood Python

Boris – 1.0 B: 2001-2002 Aq: 10/22/2007

About Boris:

Boris came to the zoo in 2007 as a relinquished pet. Boris weighs 15 lbs. 13 oz.

Status

Least Concern [2]

Geographic Region

Python brongersmai (Red blood python) found in SW Thailand, Eastern Sumatra (Indonesia) and the Malay Peninsula. This snake is generally uncommon throughout its range [2].

Python breitensteini (Borneo short-tailed python/Bornean blood python/Brown blood python) is found in Borneo [1] [3].

Python curtus (Sumatran Short-tailed Python/Short python/Short-tailed python/Black blood python/Sumatran blood python) is found in western and southern Sumatra [1]

Habitat

The natural habitat of this species in Peninsular Malaysia and Thailand is lowland swampy habitats. In northern Sumatra, the species thrives in human-modified areas, particularly oil palm plantations where it may be more abundant than in natural habitat [2]

Characteristics

Size: Males 36-60", Females 48-72" [4], 10-15 lbs [3]

Longevity: Wild- unknown, but probably ~20 years **Captivity-** 20+ [4]

Physical Description

- There is much variation of color in individuals and in populations.
- The color pattern consists of rich, bright red to orange to a duller rusty red ground color, although populations with yellow and brown are known. This is overlaid with yellow and tan blotches and stripes that run the length of the body, as well as tan and black spots that extend up the flanks [4].
- The belly is white, often with small black markings [4].
- The head is usually a shade of grey; individual snakes can change how light and dark the head is. A white postocular stripe runs down and back from the posterior edge of the eye [4]. The head is long and broad and distinctly wider than the neck.
- A special tube on the bottom of its mouth stays open to one side of the mouth so they can breathe while swallowing [5]
- Boas and pythons, which are more primitive snakes, possess tail/anal **spurs**, located next to their **cloaca**.
- These snakes generally look overweight due to their robust structure.

Dimorphism: There is little to no external differences between male and female blood pythons.

Males: **Spurs** are common on boas and pythons. Male of these snake species *typically* have more pronounced spurs than females. Seeing the differences among many different male and female snakes will help add accuracy to determining a snake's sex. Additionally, their tails are longer and thicker than females due to the internal **hemipenes**.

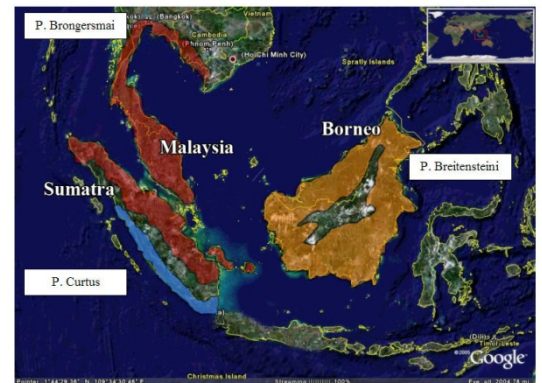
Females: Females are usually larger overall than males [2] [5]

Diet: Carnivore

Nonvenomous constrictor

Diet in the Wild: They are good hunters, feeding on typically small mammals and birds

Diet in the Zoo: 1-2 rats, every other week



Behavior

- *Nocturnal*, night active
- **Terrestrial** snake

Feeding Behavior

- Like most snakes, pythons don't chase after their prey. Instead, they are ambush hunters. They use both sight and smell to locate prey. Pythons also have an additional advantage: most have special temperature-sensitive "pits," or holes, along their jaws that can sense the heat of a nearby animal. This helps them find warm-blooded prey even in the dark or among dense foliage [6].
- **Ambush** predator – lie in wait, sometimes in a river or stream, for prey to get close before striking, their cryptic coloration allows them to camouflage in order to hide from both predators and prey. They are able to remain motionless for long periods of time, from several days to a week while waiting for prey to approach [5].
- Use their eyes and tongues to sense their prey. Also use heat-sensing pits in the upper lips to identify warm-blooded prey items [5]

Aquatic Life

- Most commonly seen at night, partially submerged on the edges of slow-moving rivers and streams or in pools while waiting for prey [5]
- A blood python living in its natural habitat will spend most of its time underwater. While submerged in a river or stream, the blood python waits for its meal to cross its path. Blood pythons would then stalk the targeted prey and ambush it. This aggressive characteristic is evident in other behaviors of the blood python.

Reproduction

- **Oviparous**, egg-laying
- Females reproduce biennially, producing 12 to 16 eggs [2]
- Females seldom lay more than a dozen large eggs (however, much larger clutches have been reported). The female remains coiled around the eggs during the incubation period, and may shiver to produce heat. However, this action requires a lot of energy and the female will only do so if surrounding temperatures drop below 90 degrees Fahrenheit [1].
- The eggs hatch after 70 to 80 days. The hatchlings emerge after 2.5 to 3 months and are about 30 cm (12 inches) in length [1].
- Blood Pythons become sexually active between second and fourth years.

Conservation

- **Use & Trade:** The species is able to tolerate high levels of harvest for the leather trade, but it is uncertain if current levels of exploitation are sustainable in the long-term [2]
- Additionally, over collection has occurred due to the international pet trade [5]
- **Threats:** This species is listed as Least Concern as it is widely distributed, its population is increasing and thriving in modified habitats and it occurs in protected areas. However, the species is heavily harvested in portions of its range and its population should be monitored to ensure sustainable levels of harvest [2].

Did You Know?/Fun Facts

- Blood pythons are one of the few species of reptiles that incubate their eggs.
- They thrive in humid environments and love to swim and soak.
- They are very vocal when handled — you can expect to hear a variety of huffs and puffs that are completely normal for these species. [3]
- The specific name, *brongersmai*, is in honor of Dutch herpetologist Leo Brongersma [4]

Glossary: List of definitions of the most important recurrent technical terms used in the text.

Cloaca - the posterior opening that serves as the only opening for the intestinal, reproductive, and urinary tracts of certain animal species (birds, reptiles, amphibians and some mammals). Also known as **vent**.

Hemipenes is one of a pair of male reproductive organs, typically held inverted in the animal's abdomen until use during mating.

Oviparous- refers to animals that lay eggs, with little or no other embryonic development within the mother.

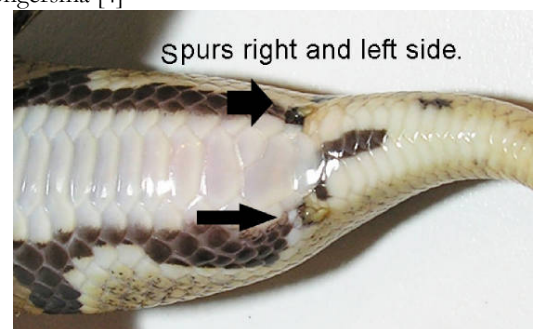
Spurs- The term spur is sometimes used to describe the pelvic spur,

vestigial limbs found in primitive snakes, such as boas and pythons and in the striped legless lizard. The spurs primarily serve as holdfasts during mating. As these form at the terminal end of the limb, they may properly be claws rather than true spurs.

Terrestrial – an animal that lives on the land, rather than primarily in the water (aquatic), trees (arboreal), underground (fossorial), etc.

Vent- see **cloaca**

Vestigial- refers to genetically determined structures that have apparently lost most or all of their ancestral function in a given species, but have been retained through evolution



References

- [1] Wikipedia, "Blood Python," 2014. [Online]. Available: http://en.wikipedia.org/wiki/Python_curtus. [Accessed October 2014].
- [2] IUCN, "Python brongersmai," IUCN, 2014. [Online]. Available: <http://www.iucnredlist.org/details/192169/0>. [Accessed October 2014].
- [3] Reptiles Magazine, "Blood and Short-tailed Python Care Sheet," Reptiles Magazine, 2014. [Online]. Available: <http://www.reptilesmagazine.com/Care-Sheets/Snakes/Blood-and-Short-tailed-Python/>. [Accessed October 2014].
- [4] Wikipedia, "Python brongersmai," Wikipedia, 2014. [Online]. Available: http://en.wikipedia.org/wiki/Python_brongersmai. [Accessed October 2014].
- [5] Maryland Zoo, "Blood Python," Maryland Zoo, 2014. [Online]. Available: <http://www.marylandzoo.org/assets/Blood-Python-Fact-Sheet.pdf>. [Accessed October 2014].
- [6] San Diego Zoo, "Pythons," San Diego Zoo, 2014. [Online]. Available: <http://animals.sandiegozoo.org/animals/python>. [Accessed 2014].