

## *Spilotes sulphureus* (Yellow-bellied Puffing Snake)

Family: Colubridae (Typical Snakes)

Order: Squamata (Lizards and Snakes)

Class: Reptilia (Reptiles)



**Fig. 1.** Yellow-bellied puffing snake, *Spilotes sulphureus*.

[<http://www.fieldherpforum.com/forum/viewtopic.php?f=35&t=13291>, downloaded 5 April 2017]

**TRAITS.** *Spilotes sulphureus* is one of largest snakes in the Americas, having a maximum total length of 3m for a fully grown adult (Boos, 2001). This is a semi-arboreal (tree-living) snake that is laterally compressed which aids in the snake thrusting outwards over extensive distances while moving between tree branches and refraining from drooping (Brady, 2010). It possesses a complex yellow/green coloration (Fig. 1) which aids in its ability to camouflage, either for a defensive mechanism, being undetectable by predators, or an offensive mechanism, staying undetectable to its prey (Brady, 2010). Its head is fairly distinct from its neck, rounded snout and moderately large eyes with rounded pupils and keeled dorsal scales with the exception of the first row. This is a non-venomous snake (Clinical Toxinology Resources, 2001-2016).

**DISTRIBUTION.** *Spilotes sulphureus* can be found in sub-tropical regions of Central and South America (Fig. 2) where it is present in Brazil, Columbia, Peru, Bolivia, Ecuador, Venezuela, Suriname, French Guiana, Guyana and Trinidad and Tobago (Clinical Toxinology Resources, 2001-2016; Jadin et al., 2013).

**HABITAT AND ACTIVITY.** Can be found in primary as well as secondary forest, usually a forest with a closed canopy. These are diurnal semi-arboreal (can be found on both trees and the forest floor) snakes which are described as being terrestrial in nature. They can be seen basking in the sunlight during the day on both the forest trees and floor where it moves amongst leaf litter and in small trees and shrubs (Clinical Toxinology Resources, 2001-2016).

**FOOD AND FEEDING.** The adult individuals would feed on birds, snakes both venomous and non-venomous and small mammals, while the juveniles feed on lizards (Clinical Toxinology Resources, 2001-2016). These snakes are quite distinct from other species of non-venomous snakes in that they do not kill their prey by coiling around them but rather they attack by firstly biting and holding their prey then press them unto a solid surface or object (Boos, 2001).

**POPULATION ECOLOGY.** This species is typically solitary and is quite rare, therefore not much research has been conducted on it. The lifespan of the *Spilotes sulphureus* can be as long as 15 years depending upon its living conditions or environmental factors (Wikipedia, 2017).

**REPRODUCTION.** Very little information has been published about the reproduction of this species, but snakes of the Colubridae family usually lay eggs. This species shares extremely similar traits with the tiger rat snake (*Spilotes pullatus*) and is likely to have similar courtship. This involves the male lying on top of the female having proper alignment of its body alongside hers then it shakes its tail vigorously. The male individuals are very persistent to gain acknowledgement for courtship from the female so they would follow the female wherever she goes until the female signals approval by bobbing her head. If a male and female are showing courtship and another male interrupts, the males would show combat. This involves the entwining of both males bodies where each would attempt to keep an upright head posture, thrusting higher than the other (Herpetological Bulletin, 2013).

**BEHAVIOUR.** Very little information has been published about the behaviour of this species with there only being information that it is very terrestrial and that when threatened, it inflates its throat which exposes a pigment which is bright yellow in colour (Fig. 3). This bright yellow is a warning signal towards predators.

**APPLIED ECOLOGY.** *Spilotes sulphureus* is not listed by the IUCN. This species may be utilized as a pet (Fig. 4).

## REFERENCES

- Boos, H.E.A. (2001). The Snakes of Trinidad and Tobago. College Station, Texas: Texas A&M University Press.
- Brady, I. (2010). Giant Bird Snake, Yellow-bellied Puffing Snake. Peru. Project Noah.
- Clinical Toxinology Resources (2001-2016). *Pseustes sulphureus*. Australia: The University of Adelaide.
- Jadin, R.C., Burbink, F.T, Rivas, G.A., Vitt, L.J., Barrio-Amorós, C.L. and Guralnick, R.P. (2013). Finding arboreal snakes in an evolutionary tree: phylogenetic placement and systematic revision of the Neotropical birdsnakes. *Journal of Zoological Systematics and Evolutionary Research* **52**: 257-264.
- Herpetological Bulletin. (2013). Male-male ritual combat in *Spilotes pullatus*. *Herpetological Bulletin*, British Herpetological Society. Pages 26-29.
- Wikipedia. (2017). *Pseustes sulphureus*. [https://en.wikipedia.org/wiki/Pseustes\\_sulphureus](https://en.wikipedia.org/wiki/Pseustes_sulphureus).

Author: Darius L. Dalip

Posted online: 2017



**Fig. 2.** *Spilotes sulphureus* geographic distribution (by country).

[<http://reptile-database.reptarium.cz/species?genus=Siphlophis&species=cervinus>, downloaded 21 February 2017]



**Fig. 3.** *Spilotes sulphureus* defensive display.

[[http://forums.kingsnake.com/view.php?id=1760151, 1762416](http://forums.kingsnake.com/view.php?id=1760151,1762416), downloaded 21 February 2017]



**Fig. 4.** *Spilotes sulphureus* as a pet.

[<http://www.faunaclassifieds.com/forums/showthread.php?t=532426>, downloaded 22 February 2017]