

Florida Pine Snake

Pituophis melanoleucus mugitus

Upland Snake Species Profile



Appearance: Florida pine snakes are large, non-venomous snakes that can reach maximum lengths of over 7.5 feet, although most snakes average 4 – 5.5 feet. Florida pine snakes have a base cream-to-tan color, with brown blotches or saddles extending the length of the body. As the markings approach the tail they may become deep red or salmon in color.

Quick Fact

Pine snakes have a modified epiglottis, a flap of skin in their mouth, that allows them to hiss loudly.

Name Game

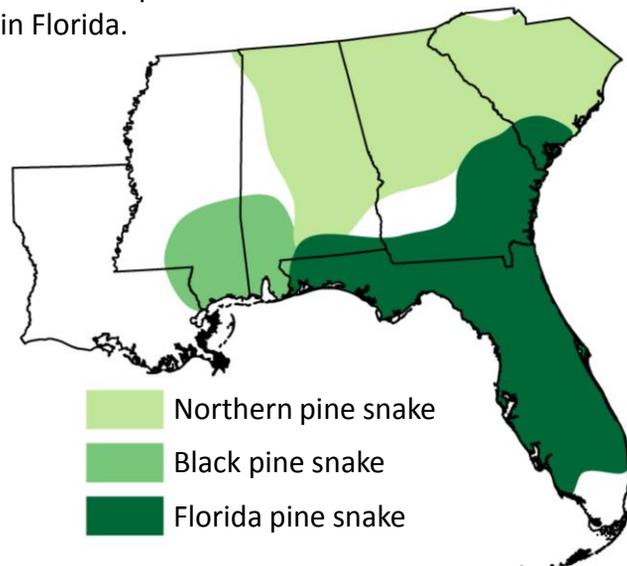
The genus of this species, *Pituophis*, roughly translates to “pine snake”. The species name, *melanoleucus*, means “black and white”, and the subspecies designation, *mugitus*, means “bellowing”. All are apt descriptors of this snake.

When encountered in the wild, pine snakes will put on a remarkable defensive display that includes bluff striking and loud hissing. Pine snakes rarely bite, but can deliver a powerful strike.

Range: There are three pine snake subspecies that occur within the range of the gopher tortoise. The Florida pine snake ranges from southern South Carolina, westward through central Georgia and Alabama, and through the Florida peninsula. The northern pine snake (*Pituophis m. melanoleucus*) can be found in Alabama and the South Carolina Coastal Plain. The black pine snake (*P. m. lodingi*) is found chiefly in south central Alabama and southeastern Mississippi, and presumed extirpated in Louisiana. Florida pine snakes may intergrade with black pine snakes west of the Escambia River in Florida.

Natural History: Florida pine snakes are habitat specialists that can be found in open pine forests. They have similar habitat requirements as gopher tortoises. This is a very secretive snake that spends much of its time underground in burrows excavated by gopher tortoises and pocket gophers. It is so specialized for life underground, that it has a special scale on its nose, called the rostral scale, that is used for digging. Pine snakes are most active in the late spring and early summer. These snakes have a broad diet, but feed primarily on small mammals, and favor southeastern pocket gophers (*Geomys pinetus*) when available.

Protections: Florida pine snakes are state protected in Florida and Georgia, and are a species of conservation concern in Alabama and South Carolina.



**Upland Snake
Conservation Initiative**

www.gophertortoiseconservation.org

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Conservation Challenges: Florida pine snakes are thought to be declining throughout their range. Research has demonstrated that these snakes can spend up to 80% of their lives underground. Living underground presents a suite of challenges to wildlife biologists studying the species. Little is known about the biology and ecology of this species, and population estimates are difficult to determine for the species because of their fossorial habits. Roads also present a unique challenge to the species as they may be both unwilling to cross roads and highly susceptible to being hit by cars due to their large size. Pine snakes can benefit from living in close association with southeastern pocket gophers, another species that may be declining in southern forests.

Snake Vocabulary

Fossorial: Adapted to dig, burrow, and live underground.



Southeastern pocket gophers are important to Florida pine snakes.

Threats: Florida pine snakes face several threats, including habitat loss and fragmentation due to development and conversion of land to agriculture or silviculture. These habitat specialists require landscapes that burn every few years. A lack of natural or prescribed fire can alter the landscape to a state that is inhospitable to pine snakes. Florida pine snakes are susceptible to over-collection because of their rare status and pleasing looks. Predation by domestic animals, such as outdoor house cats, can also cause mortality.



Florida pine snakes (top photo) are sometimes confused with gray rat snakes (bottom photo).

What You Can Do To Help: You can help the Florida pine snake by being a proponent of prescribed fire. Healthy landscapes are important to many reptile and amphibian species, and many are declining because of improper habitat management. If you see a Florida pine snake, you can also contact your state wildlife agency with its location. GPS coordinates and photographs are very helpful to biologists.

For More Information:

Gibbons, W. 2017. Snakes of the Eastern United States. University of Georgia Press, Athens, GA.

Jensen, J. B., C. D. Camp, W. Gibbons, and M. J. Elliot. 2008. Amphibians and Reptiles of Georgia. University of Georgia Press, Athens, GA.

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