

Northern (Gopher)

Pine Snake

*Pituophis
melanoleucus*



Habitat and Range

- Habitat: These snakes live in pine barrens, sand hills, dry rocky mountain ridges, old fields, and mixed scrub pine and oak woods.
- Range: Eastern pine snakes live in the eastern half of the United States, and the northern subspecies lives in New Jersey, the Carolinas, the Virginias, Maryland, New York, Kentucky, Tennessee, Alabama and Georgia.

Average Size

- Length: 36-100 inches (about 3-8 feet), up to 2 inches in diameter
- Weight: Undetermined (Possibly 3-8 lbs)

Average Lifespan

- In the Wild: Undetermined
- In captivity: Up to 20 years (San Diego zoo female)

Physical Characteristics

- There is no sexual dimorphism.
- Northern pine snakes have 27 to 37 rows of keeled scales and a single anal plate. This subspecies is dull white to cream on the back and intensely white on the sides with black body blotches toward the head and brown blotches toward the tail. Their heads are shaped for digging and moving through forest floor debris. They are fairly heavy-bodied, non-venomous constrictors.



Behaviors

- Activity Cycle: Diurnal, terrestrial, sometimes fossorial; hibernate
- Vocalizations: Pine snakes have a modified glottis that can intensify their hiss, and they shake their tail to imitate a rattlesnake. They can also make a bull-like bellow to intimidate predators (giving another subspecies the common name of "bullsnake").
- Social Structure: Likely solitary, no studies showing group dynamics
- They have a pointed snout and enlarged rostral scale (tip of the nose) for burrowing underground to escape uncomfortable temperatures or predators, to build their nests, and to find prey.
- Usually found on or in leaf litter on the ground, but may occasionally climb into bushes or trees.

Diet

- In the Wild: These snakes eat many small mammals (mice, ground squirrels, gophers, etc) that are considered agricultural pests, keeping their populations down.
- In the Zoo: Our northern pine snake eats different sizes of mice.

Reproduction

- Incubation Period: 58-100 days, average 73
- Parenting: Eggs are laid in a nest and abandoned, with no further parental care.
- Clutch Size: 3-24 eggs, average 8
- Breeding Behaviors: Female breeding cycles occur from April to May, laying their eggs from May through July in burrowed nests, under logs and rocks. Some females will use the same nest. The eggs will hatch from August to September, with hatchling ratios favoring males (adult ratios favor females). There is some male-male combat in competition for mates.
- Pine snakes reach maturity at 3 years old for both males and females.

Conservation

- Status: Least Concern
- Facts: This subspecies is protected by law in New Jersey, but it does have several populations in protected areas. The biggest threat to the pine snakes are human activity, including encroachment and habitat destruction.
- Predators: Pine snakes are preyed upon by many carnivores, including feral cats and dogs, raccoons, foxes, short-tailed shrews, and striped skunks. Their eggs are often eaten by scarlet snakes.

Classification

- Kingdom: Animalia
- Phylum: Chordata
- Subphylum: Vertebrata
- Class: Reptilia
- Order: Squamata
- Family: Colubridae
- Genus: *Pituophis*
- Species: *P. melanoleucus*
- Subspecies: *P. m. melanoleucus*

Interesting Facts

- Young pine snakes can hide from birds of prey under pine boughs and leaf litter.
- Pine snakes belong to the Colubridae family of snakes, which is the largest snake family! It includes corn snakes, hognoses, kingsnakes, garter snakes, and MANY more.