

NORTH AMERICAN RATSNAKE CARE SHEET

(Genus Scotophis)

****For generalized, background information on snake care and husbandry, please see the "General Snake Care Sheet" first****

North American ratsnakes, as they remain commonly known are large and powerful arboreal to semi arboreal species of rat snakes native to much of the eastern, central, and west central United States, and into southern Canada. These muscular constrictors will readily climb and ascend into trees, barns, and other out buildings in search of rodents, birds, and bird eggs as well as a means of seeking refuge. As with many other snakes, ratsnakes often greatly benefit gardeners, farmers, and homeowners in that they consume vast quantities of rodents which would otherwise proliferate, consume, and spoil crops. Most species of these ratsnakes can become large, attractive and docile snakes to maintain in the reptile industry, and are now being bred in albino, brindle, white sided, and leucistic variations on a regular basis.

***Overall Difficulty Level: Novice**

This taxa of North American rat snakes have simple, straightforward care requirements that do not differ drastically from corn snakes or other North American rat snakes. This is a species which tends to be larger, stronger and more active climbers than corn snakes, but still can be easily maintained provided potential keepers possess a general knowledge and understanding of reptile, specifically snake, husbandry. Given the proper care, black rat snakes can attain longevity of 15-25 years in captivity on average.

Size and Description

Hatchling N.A. rat snakes typically range from 7-12 inches in length. As adults, they typically average between four and six feet (48-72") although some specimens have been known to reach upwards of eight feet (96"). As juveniles, they are typically grayish to cream colored with darker gray, reddish brown, to black dorsal and lateral blotches. A further description of the different species are described in the following section. Many captive bred and born color and pattern morphs are also now commonplace in the reptile industry, including but not limited to various strains of albinism and amelanistic animals, as well as white sided, "Brindle", Leucistic, and High Red and High Yellow phases.

North American Ratsnake Taxonomy

Kingdom: Animalia

Phylum: Chordata

Class: Reptilia

Order: Squamata

Suborder: Serpentes

Family: Colubridae

Subfamily: Colubrinae

Genus: Scotophis

North American ratsnakes have undergone considerable, and often confusing taxonomic revisions over the years. Formerly placed in the genus *Elaphe*, and then *Pantherthopis*

respectively, five subspecies were formerly and widely recognized. However, recent scientific and taxonomic examination of these species based on morphological, mitochondrial DNA, and geographic distribution differences have resulted in classification of three distinct enough species; The Western Rat snake (*Scotophis obsoleta*), Midland Rat snake (*Scotophis spiloides*), and Eastern Rat snake (*Scotophis alleghaniensis*). A fourth, and westernmost species, the Baird's Rat snake (*Scotophis bairdi*) has also been placed into this genus.

All belong to the family Colubridae. All snakes belong to the suborder Serpentes. All snakes and lizards then belong to the next highest ranking, order Squamata. All reptiles then obviously belong to the class Reptilia, phylum Chordata, and finally kingdom Animalia. It should be noted that all members of the North American forest and woodland dwelling ratsnakes have undergone recent taxonomic revision from the genus *Panthertophis* to the genus *Scotophis*.

North American Rat snake Species

Western Rat snake (*Scotophis obsoletus*): The western rat snake, after taxonomic reclassification, now consists of those localities of Black Rat snakes (*Panthertophis obsoleta obsoleta*), Texas Rat snakes (*Panthertophis obsoleta lindheimeri*), and any intergrades thereof occurring west of the Mississippi River.

Midland Rat snake (*Scotophis spiloides*): The midland rat snake, after its taxonomic reclassification, are those populations of North American rat snakes occurring in the region west of the Apalachicola River, and east of the Mississippi River. Formerly known localities of the Black Ratsnake (*Panthertophis obsoleta obsoleta*) and Yellow Rat snakes (*Panthertophis obsoleta quadrivittata*) occurring within this range, as well as the Gray Ratsnakes (*Panthertophis obsoleta spiloides*) and any intergrades thereof occurring in this region are now classified as the "Midland rat snake".

Eastern Rat snake (*Scotophis alleghaniensis*): The eastern rat snake, after taxonomic reclassification, has been found to consist of those populations inhabiting the eastern United States, and more specifically, areas east of the Apalachicola River. Formerly, what were known as the Yellow Rat snakes (*Panthertophis obsoleta quadrivittata*), Everglades Rat snakes (*Panthertophis obsoleta rossalleni*), localities of Black Rat snakes (*Panthertophis obsoleta obsoleta*) and any intergrades thereof occurring in this region are now classified as the "Eastern Rat snake".

Baird's Rat snake (*Scotophis bairdi*): Baird's ratsnakes are the westernmost species of North American ratsnake, occurring in the dry and rocky regions of the Big Bend Texas area and portions of northern Mexico. Averaging four to five feet (48-60"), The Baird's rat snake can have a variable ground color ranging from tannish-gray, reddish-brown, yellowish, to pinkish with four dark, distinctive longitudinal dorsal and lateral stripes running the length of the body. The head and neck region of many specimens is awash in red to reddish-orange. Small birds and rodents are the staple diet of this species, although some juveniles may also consume frogs or lizards.

Temperament and Handling

These N.A. rat snakes, like many species of snake, are often initially more defensive as hatchlings or juveniles. They may gape and hiss, rattle their tails, musk/defecate, and attempt to

bite in response to what they perceive as a potential threat (you handling them). Individual temperament and response to being handled vary among adult rat snakes however. Many can become docile and impressive snakes that are reluctant to bite and are easily handled. Some others however (most often in the case of wild caught animals) remain somewhat irascible, nervous, and unpredictable as adults. It should be kept in mind however that even a supposedly docile snake may bite or react defensively if suddenly startled or frightened or when food is detected (resulting in a feeding response bite).

Enclosure/Housing

The enclosure you choose must be secure to prevent the escape of the inhabitant and provide adequate ventilation. Hatchling to juvenile rat snakes can be maintained in a 15-20 gallon long glass terrarium with a secure screen top. Larger numbers of hatchling to juvenile rat snakes can be kept in commercially available rack systems consisting of appropriately sized plastic shoe box sized containers with holes punched or melted in for ventilation. These containers are made by Iris, Rubbermaid, and Sterilite. Racks are usually heated with Flexwatt heat tape either installed along the back wall of the rack as back heat or on the rear half of the floor of each slot as belly heat, and should be monitored with a quality thermostat.

Adult N.A. rat snakes can be large and active colubrids requiring at minimum a 40 gallon long (36" X 24") glass terrarium or similar sized commercially available plastic, wooden, melamine, or PVC enclosure with front opening sliding or hinged acrylic or glass doors. Larger quarters such as 48" X 24" would not hurt for maintaining these snakes as well. These types of enclosures provide increased security for snakes within them and space can be better utilized with them since they are stackable, and temperature and humidity can be relatively easy to control within them. Most of these types of caging also offer built in lighting and heating elements as well. Adults can also be kept in rack systems consisting of 41 quart (at minimum) or larger blanket box sized containers as previously described.

A hide-box for allowing the snake to retreat from view is recommended as part of a terrarium setup as well. Besides commercially available hide boxes, you could modify many things to serve as a hide box. They can include opaque plastic storage container, plastic litter pans for cats, and inverted flowerpots for example. A water dish should also be provided within the enclosure and be changed at least once weekly or sooner if fouled. The dish should be heavy enough so that it isn't easily tipped over (plastic or ceramic crock dishes work well). It should also be cleaned and disinfected periodically.

Temperature and Heating

As with all reptiles, N.A. rat snakes are ectothermic animals, meaning it is important to provide them with an external heat source and thermal gradient for proper digestion and gestation. There should be a warm side and a cooler side to the enclosure. To create the warm side, you can use an under tank heater (UTH), Flexwatt heat tape, or a radiant heat panel on one half of the enclosure. Many commercially available plastic and PVC enclosures and racks come with their own heating elements. The warm side should remain around 85-90 degrees Fahrenheit. It is also important to disallow any snake to come into direct contact with any heating element, as thermal burns can result, and can sometimes be severe, requiring professional veterinary attention. UV or other overhead lighting is not required for most species of snakes, particularly primarily

nocturnal species such as black rat snakes. However, overhead UV lighting or fluorescent lighting can improve the cage's aesthetics as well as visibility within.

Substrate

The substrate is the enclosure's bedding. Newspaper, commercially available cage liner material, cypress mulch, or aspen shavings or Sani Chips are all acceptable substrates for North American rat snakes. Avoid pine and cedar shavings, as these substrates are toxic to snakes. The substrate should be kept dry and be spot cleaned when needed to reduce the likelihood of bacterial outbreaks. A complete substrate change and replacement should be done periodically as well, with that interval depending on the substrate being used.

Feeding and Diet

North American ratsnakes are powerful nonvenomous constrictors, although they will simply seize and ingest smaller prey items without constriction. In their native ranges, they will typically consume rodents and other small mammals, small birds and bird's eggs, and occasionally lizards and amphibians as juveniles.

Neonate rat snakes can be started off two to three times weekly on pinkie rats or fuzzy rats. The size of the prey item should be increased accordingly as the snake grows. A general rule of thumb to follow is to offer prey items that are no larger than the widest point of the snake. Adults of most species can be offered small to medium adult mice to small/medium adult rats depending on the size of the snake every five to seven days. It is important to not to overfeed snakes though, since obesity and compromised health of the snake can result over time.

Summary

Although the North American ratsnakes are relatively larger, more active, muscular, and sometimes more aggressive snakes than the typically smaller and more commonly kept corn snake, they and their many commonly available morphs and combo morphs (including albino, white sided, brindle, and leucistic morphs) have still long remained a commonplace staple among many within the herpetocultural hobby and industry, with new color and pattern morphs continuing to be produced each year. Even normally colored and patterned black and Texas rat snakes can often make for impressive, alert, and inquisitive snakes that exhibit strong hardiness, and seldom present any significant husbandry or feeding dilemmas in captivity.