



Portsmouth Reptile & Amphibian Society
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P.R.A.S Care sheet No 8



Species Common Name: The Black Rat snake

Scientific Name: *Pantherophis obsoletus obsoletus*

Care Difficulty:

Easy; make a good starter snake

Introduction:

The Black Rat snake belongs to the *obsoleta* family of North American Rat snakes, this family also includes:

- **Yellow Rat snake** *Pantherophis o. quadrivittata*,
- **Texas Rat snake** *Pantherophis o. lindheimeri*
- **Everglades Rat snake** *Pantherophis o. rossalina*
- **Grey Rat snake** *Pantherophis o. spiloides*

Problematic subspecies include:

- **Deckerts Rat snake** *Pantherophis o. deckerti*
- **Gulf Hammock** *Pntherophis o. williamsi*
- **Outer Banks Rat snake** *Pntherophis o. parallela*
- **Bairds Rat snake** *Pantherophis bairdi*

Distribution:

The Black Rat snake is the most widely distributed rat snake in North America with a range from New England south through Georgia and west across the northern parts of Alabama, Mississippi, and Louisiana, and north through Oklahoma to southern Wisconsin.

Habitat:

Rocky hillside of mountains to flat farmland, from sea level to altitudes in the Appalachian Mountains

Description:

The family of *obsoleta* are an interesting species to grow up from hatchlings as the

Black, Yellow, Everglades & Bairds Rat snakes are all hatched with a blotched pattern, and a dull coloration, as they grow the blotched pattern disappears and is replaced by there adult stripes and colour in the Yellow and Bairds Rat snakes and the Black Rat snake just gets blacker with age till it is in the best specimens totally black.

Size: 1.5-2.4m (5-8').

Pattern & Colour Morphs of the Black Rat snake:

Amelanistic:

(Red Albino Phase, Lavender Phase White Albino Phase)

Two different strains of the Amelanistic gene are to be found in the Black Rat snake, so it's possible that breeding two albino animals together will only produce normal looking animals. The albino gene strips away all black pigmentation leaving us with a beautiful snake in shades of orange and white in the red albino phase. The white Albino is in the most extreme cases a pure white snake but usually traces of the saddles can be seen these are a peachy colour on a white or cream background. Lavender phase exhibits shades of purple in the saddles with a creamy white background.

Hypomelanistic: The Hypomelanistic gene diminishes the amount of black pigment leaving us with a snake in shades of purple and whites.

Brindle: This mutation covers the body with dark speckling instead of the normally total black coloration. The blotches are still present, but the speckling gives them a really unusual look the brindle mutation is also being bred in the Amelanistic form.

Chocolate Chip: A pure white snake with varying amounts of black speckling. Really spectacular to look at.

White Sided: (Liquorice, Liquorice Stick)

A unique pattern the sides of the snake are pure white in adults with only a black-blotched pattern running down the entire length of the back.

Leucistic: A pure white snake with dark blue eyes.

Calico: Calico snakes develop varying amounts of white scattered patches, usually as they age, although some exhibit this trait at birth. The spots are usually small, appearing as freckles, which may form into larger blotches.

Housing:

Hatchling Black Rat snakes should be kept in a small container with a paper towel substrate, provided with a hide and fresh drinking water. Adults & Juveniles can be housed in aquarium type enclosures, vivarium or a racking system, a general rule for deciding the size of a snakes home is its length should be approximately equal to three quarters your snake's length. The cages width should be about a third of your snake's length. A hide should be provided at both ends of the vivarium. Climbing branches should be made available because the Black Rat snake is an excellent climber; it has been witnessed in the wild climbing near vertical surfaces. Good husbandry and overall cleanliness are essential to your Rat snakes general state of good health. If the enclosure is dirty, too wet or dry, or too hot or cold, this will cause skin or respiratory problems or both.

Temperature:

A thermal gradient with a hot spot of 29°C (84°F) and a cooler end around 24°C (75°C) should be provided to enable your snake to thermoregulate.

Substrate

Hatchlings are best kept on paper towels. Adults & Juveniles can be kept on sterilized bark/wood chippings or aspen bedding, newspaper and paper towels are often used in racking systems but are not very pleasing to the eye when used in other forms of housing. Pine & Cedar shaving should never be used, as these are toxic to your snake.

Temperament.

Calm to damn right aggressive! I have worked with Black Rat snakes that have had an even temperament, but also those that would strike and bite as soon as you went inside their cage to do routine maintenance. On the whole though a captive bred specimen that is handled regularly will settle down. Hatchlings can be a bit nippy but again with handling they will calm down.

Diet and Feeding:

Black Rat snakes in captivity can be maintained on a diet of rodents. In the wild they are known to take rodents including chipmunks, small lizards, nestling birds and birds egg and the occasional frog. As with all reptiles a supply of fresh drinking water is a must.

Hibernation:

To hibernate a your Rat snake for the winter, make sure it has had no food for two weeks and that the temperature is normal during this time allowing the snake to fully digest it's last meal and empty it's gut. After this the temperature should be lowered gradually over a few weeks until it is at 13-15°C (55-60°F). The snake should not be fed during this period but fresh drinking water should be available at all times. After 10-12 weeks the snake can gradually be warmed up over a two-week period and can then be offered food again.

Breeding:

After hibernation the female will enter a shed. Once she has gone through this process she will be ready to breed. Female Black Rat snakes should only be bred from if they are healthy and feeding well. A female that has eaten well from a hatchling may be sexually mature by 18 months of age. The female should be introduced into the male's cage. Males will sometimes not eat at this time being more interested in breeding than eating. Once several copulations have been witnessed or the female looks fatter mid body they should be separated. The female should be given a laying box, a plastic container big enough for her to coil loosely in filled with damp sphagnum moss will suffice. She may refuse food during her pregnancy, or may only except smaller prey items than usual. Expect her to lay her eggs from 5-14 days after she has shed. The eggs, which could number between 5 and 30, should be removed to another container two thirds filled with damp vermiculite (when a handful is squeezed in the palm of the hand only a small amount of water should be produced.). Do not rotate the eggs, and don't unnecessarily handle them. The box should have a fitted lid, and the humidity inside should be 100%. Some condensation will form on the lid, but if there is too much condensation and it starts dripping on the eggs, the vermiculite is too wet. To fix this, sprinkle a little dry vermiculite over the surface to take up the extra moisture. I usually have the egg boxes ready in the incubator a few

days before I expect the female to lay, this way the vermiculite is at the right temperature and any mistakes made in making up the vermiculite mixture can be rectified. The eggs should be checked weekly, removing the lid would give a good exchange of air. The Eggs should be incubated at 26-28°C (80-83°F). The eggs should hatch after 52-66 days.

The female should be offered food after she has lain, although some will refuse until they have had their post laying shed. It is a good idea then to feed her twice a week on smaller prey items until she has recovered to her previous weight. The hatchlings should be housed separately, and should start eating pinkie mice after their neonate shed which will occur anywhere from 5-10 days from leaving their egg.