

Special senses of snake:

Smell: Snakes flick their forked tongue to taste the pheromones from the air. The air particles are transferred to the Jacobson's Organ, which interprets food, enemies, breeding time and potential mates.

Sound:

The inner ear of snakes can hear low frequency airborne vibrations. The quadrate bone present in the jaws of snakes can detect ground vibrations.

Vision:

Snakes have very refined vision capabilities adapted to their habitat and prey. Snakes that are active during the day have an ultraviolet ray blocker while snakes that are active in the night have vision, which enables ultraviolet rays to pass through, and these snakes have night vision.

Heat:

Most snakes have heat sensitive pit organs, which can detect minute changes in temperature. This helps them in locating warm-blooded prey and track their movement.

Characteristics of Snakes:

Vertebra:



Snakes have 100-500 vertebrae in their body, which enables them to be swift in their movement. This also helps them to be superbly flexible.

Moulting:

Snakes shed their epidermis (the outer skin) at regular intervals, as they grow in size. This is called ecdysis or moulting.

Body Temperature:

Snakes are ectotherms, hence their body temperature cannot be controlled by them but is dependent on the environmental temperature.

Offspring:

Snakes either lay eggs, or give birth to live young snakes. Hence they are classified as:

1. Oviparous - Those who lay eggs
2. Ovoviviparous - Give birth to live snakes (where the eggs hatch within the body of a few snakes).

Avoidance of snake bites:

Be Aware: When you are aware of the presence of a snake do not try to harm or kill it. Almost 70-80 pc of the snake bites happen while trying to kill or harm a snake. The best way to drive away a snake is by a jet of water directed towards it.

Be prepared: In case you spot a snake, try not to disturb it, but call official snake rescuers like **Wildlife SOS, 9871963535, info@wildlifesos.org** with photographs and location.



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Black-headed Royal Snake *Spalerosophis atriceps*

Local Name: Rajitbansar

Size: 1500-2000mm; Non-venomous

Habits and Habitat:

Inhabits semi arid and arid areas. Hibernates in crevices among stones in winter and as the year advances and the sun gets hotter, emerges for basking but retires into its stony fastness at the least sign of danger. Feeds largely on rodents even climbing trees when necessary for this purpose.



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Brahminy Worm Snake *Ramphotyphlops braminus*

Local Name: Do muha sanp

Size: 125-230mm; Non-venomous

Habits and Habitat:

Lives beneath the soil, stones, or debris, and is seen only when these are turned over, or when flushed out of its subterranean burrow by rain. Usually solitary, but occasionally in large aggregations in rotting wood. An active burrower, its highly polished scales help its passage through the soil. A slow mover above ground, it makes vigorous attempts to escape if dislodged from its hiding place, or when handled, anchors itself with its tail spine and wriggles restlessly in all directions. Often seen inside houses. It is preyed on by other snakes.



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Checkered Keelback *Xenochrophis piscator*

Local Name: Pani ka sanp

Size: 600-1750mm; Non-venomous

Habits and Habitat:

The most common freshwater snake. Frequents water and is very common in tanks, paddyfield, pools and rivers. In swampy areas it may be seen away from water. Strikes rapidly and with great determination, holding on tenaciously. Erects and flattens forebody prior to striking but temperaments vary and some are very mild. An extremely active snake, capable of jumping clear of the ground and will do so repeatedly if pursued. In northern India it hibernates during the winter but on warm days individuals are often seen sunning themselves on vegetation above water level.



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Common Sand Boa *Eryx conieus*

Local Name: Dumui

Size: 500-1000mm; Non-venomous

Habits and Habitat:

Generally considered a snake of arid areas, but it is by no means confined to such tracts, common sand boa is a dull, phlegmatic creature, but of uncertain temper. While some bite on the least provocation, others when irritated sulk in a most determined manner, remaining quiet motionless and refusing to offer any resistance. Like the rest of the genus, it is an earth snake and burrows into loose soil easily and speedily.



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Common Wolf Snake *Lycodon aulicus*

Local Name: Kauriala

Size: 300-800mm; Non-venomous

Habits and Habitat:

The snake most often seen near and in human habitation. Among snakes, the wolf snake is the one that seems to seek out and profit by a human environment. The common wolf snake is the species most often met with in houses, whether in the country or in heavily congested urban areas. It hides during the day in crevices in masonry or beneath boxes, stones or any other convenient hideout. A lively snake, it readily strikes when provoked.



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Indian Rat Snake *Ptyas mucosa*

Local Name: Dhaman

Size: 2000-3500mm; Non-venomous

Habits and Habitat:

Essentially a snake of the plains, but has been recorded up to 1,800 m. A common snake throughout the Indian subcontinent. Diurnal, but in populated areas may not be commonly seen out during the day. Takes readily to water and swims vigorously with the head well above the water. Dives with equal facility. Equally adept at climbing and is often seen on trees, has been reported to jump down from a height of 6 m when disturbed.



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Indian Rock Python *Python molurus molurus*
Local Name: Ajar
Size: 3000-7620mm; Non-venomous

Habits and Habitat:

Normally a jungle dweller, occurring in dense as well as in open forests, with rocky outcrops. In the absence of forests occurs in rivers and jheels. A lethargic and slow moving snake even in its native haunts, exhibiting little, if any, timidity and rarely rousing itself seriously to escape even when attacked. Pythons also have a peculiar method of movement, a rectilinear progression, the body moving in a straight line like a millipede.



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Red Sand Boa *Eryx johnii*
Local Name: Do muha
Size: 750-1000mm; Non-venomous

Habits and Habitat:

Widely distributed in the plains of the Indian subcontinent. In hills up to about 600 m elevation. A gentler temperaments, being a particularly inoffensive creature. It is a deft and speedy burrower, nosing its way into the earth by using the transverse ridge on its snout as a digging implement. Its movements above ground, in keeping with its heavy body and reduced ventrals, are slow and clumsy.



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Russell's Kukri *Oligodon taeniolatus*
Size: 300-590 mm; Non-venomous

Habits and Habitat:

Found all over the Indian subcontinent. It is not uncommon near human habitation. Largely diurnal. A very common snake in the evergreen forests at higher elevations of the Western Ghats. Fond of basking in the sun on rock or grass. Feeds mainly on eggs of other reptiles and frog spawn.



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Spectacled Cobra *Naja naja*
Local Name: Nag
Size: 1000-2200mm; Venomous

Habits and Habitat:

Cobras are eclectic in habitat. Absent in arid deserts and hills above 1800 metres. Found almost anywhere, in heavy jungle, open cultivated land and populated areas where old masonry gives them an ideal refuge. White ant nests, holes in the ground or the tangle of roots at the base of a tree are particularly favoured. Frequently found near or in water and is a strong swimmer.



Snakes of Delhi

ABOUT DEPARTMENT OF FORESTS AND WILDLIFE, GOVERNMENT OF NCT OF DELHI

The Department is responsible for the improvement of the overall environmental quality, development of forests including the Ridge, protection of wildlife, their habitats and preservation of trees in the National Capital Territory of Delhi in accordance with the provisions made in the Acts and also the directions of the Honourable Supreme Court of India and Delhi High Court. For further information visit forest.delhigovt.nic.in/ or contact the Principal Chief Conservator of Forests at 011 23379629.

ABOUT THE BOMBAY NATURAL HISTORY SOCIETY (BNHS)

BNHS is the oldest and one of the largest non-governmental organisations (NGO) in the Indian sub-continent. For more than 135 years, it has been actively engaged in conservation of nature and natural resources through research, education and awareness. For further information visit www.bnhs.org or contact 022 2282 1811.

ABOUT THE BNHS CONSERVATION EDUCATION CENTRE (CEC), DELHI

CEC Delhi is set up as a part of the collaborative project between Dept. of Forests & Wildlife, GNCTD and BNHS to educate the people of Delhi about conservation of nature. The centre has reached out to different target groups by organising highly informative and interesting conservation education programmes. For further information mail to cecbnhsdelhi@bnhs.org or contact 91 8800741864.

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Reptiles form one of the four classes of land dwelling vertebrates. The history of reptiles goes back at least 300 million years, even presently, the number of living reptiles, which is about 6000, is double the number of species of mammals.

Often overlooked and shunned, these snakes form an important part of our urban ecology and help in bio-control of pests. It is important to change the mindset of the young generation and expose them to the amazing diversity of life around them. With this thought in mind, I hope this guide will help in promoting awareness and a step towards protecting these wonderful creatures.

Happy Herping!

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Introduction

There are over 25 recorded species of snakes in Delhi NCR.

Snakes can be distinguished from lizards only by a combination of characters some of which are:

- ◆ The absence of fusion between the two halves of the lower jaw, which are united by ligaments only and are therefore moveable independently.
- ◆ The absence of eyelids, external ear openings and of limbs. A few primitive forms however have vestigial hind-limbs
- ◆ The scales on the body of the snake form a pattern that is characteristic feature of the species.

