

Spectacled Cobra *Naja naja*

Taxonomy

Kingdom: Animalia

Phylum: Chordata

Class: Reptiles

Order: Squamata

Family: Elapidae

Genus: *Naja*

Species: *naja*

Distribution

The Spectacled Cobra (*Naja naja*) is a venomous snake found in India, Pakistan, Sri Lanka, Bangladesh, Nepal, Bhutan, and Afghanistan (Uetz et al. 2022).

Habitat and Ecology

Inhabits almost all habitat types, from dry arid scrubs to pristine rainforests and thrives in agricultural areas and countryside human habitations (Ganesh 2015). Prey includes rodents, toads, frogs, birds, lizards, and other snakes (Whitaker & Captain 2004). Lays of 12–30 eggs during March–July which hatch after two months. Female stays with the clutch during incubation (Ganesh 2015).

Habits

It is active in the day or night depending on the weather or atmospheric conditions. Highly venomous with short-fixed front fangs. Produces neurotoxic venom. Its defensive behavior or threat display is observed forming a distinctive hood, which has a spectacle marking to ward off its predators (Ganesh 2015).

Population

The studies on population trends have not been done since it is widely distributed and very commonly occurring, as they are diurnal, large (150–220 cm) in body size and adaptive to the fluctuations in the environment (Ganesh 2015). Research on snakes and its diversity in different parts of countries has been conducted that includes *Naja naja* species as well, but the exact population cannot be estimated, because it is an opportunistic survey, and the record of these species will mostly be through snake capturing and re-location or translocation. Chances of the same individual being rescued might be repetitive and few individuals might have escaped without our notice.

Threats

- The major threat is habitat loss, as there is rapid growth of human population, the resources and the habitats are being used to a greater extent. Cobras are adaptable to urbanized sectors and fluctuations in the surroundings (Chowdhury et al. 2021), but it doesn't mean that there is no habitat degradation or loss. Humans have invaded their habitat due to which *Naja naja* species are being sighted more in the urbanized ecosystem, as they must go in search of prey for their survival.
- It has been predicted that species of Cobras that includes *Naja naja* will face threat from climate change in the next 50 years. Over exploitation due to trading, medicinal studies and human population growth are the major threats (Chowdhury et al. 2021).

- Snake-human interactions are direct threat (Kalki et al. 2021), as people lack awareness about the snake and are afraid of snakebite, so to avoid this they kill the spectacled cobra as soon as they spot in their surroundings.
- There are reports regarding spectacled cobras being captured by snake charmers in huge numbers especially during “Nag Panchami festival” and are brutally tortured and killed, as it is a common religious belief of people (Menon 2015).
- Post capture translocation at one location by snake catchers might cause conflicts between species and can lead to less availability of resources and space in that area.

Assessment

Species assessment becomes difficult due to lack of data on population trends over the years; however, there is a perceptible decline in the populations all across as reported by many people. The extent of occurrence and area of occupancy of spectacled cobra is larger as it is widely distributed, and other criteria for the assessment will not be applicable as well, but based on the threats I could co-relate and predict the species risk in the near future. My inference based on the collected data of Spectacled Cobra, due to past, ongoing and increasing predicted threats, it falls under the category **Near Threatened (NT) A2cd + A3cd**.

Research needed

- Even though the *Naja naja* species are widely distributed there are new threats being faced as years pass. There is a need for research on these species, such as,
- Geo tagging should be done and studied so that we can document more data. Post capture

release of snakes undergo a lot of stress due to change in the home range and it should be studied with more individuals.

- Taxonomical studies play a significant role as there are different species and subspecies sharing adjacent habitat and being sure or certain of the classifications will aid in accurate assessment and avoid unnecessary confusions among the species.
- Population trend-related studies must be carried out, as the data provides us an insight on fluctuations in population over the years.
- Behavioral studies.

References

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