

Short Research Article

First new Record of albino Common Kukri Snake (*Oligodonarnensis*) (Shaw, 1802) from Uttarakhand, India

Comment [A1]: This record should be considered a record of a case of albinism rather than a record of a new species. Considering that the species is widespread in India, Bangladesh, Afghanistan, Nepal, Pakistan and Sri Lanka. Albinism is a rare genetic condition, It is not a new species

Abstract:

The discovery of an albino *Oligodonarnensis* in Dehradun, Uttarakhand, marks a significant addition to the known distribution of this species. Previously, the *Oligodonarnensis*, a rare variant of the kukri snake, had been observed only once before, making this find particularly noteworthy. Such records are crucial for understanding the biodiversity and distribution patterns of reptiles in India, contributing to the conservation efforts and scientific knowledge of herpetofauna in the region.

Keywords: New Record, Albino, Dehradun, Uttarakhand, Snake, Kukri Snake.

Comment [A2]: Keywords must be changed because they are in the title. (Colubridae, Squamata)

Introduction :

Around 314 amphibians and 518 reptile species comprise India's herpetofauna (reptiles and amphibians) (Angals et al. 2011, Dinesh et al. 2011). Unfortunately, in contrast to other reptiles, snakes have not gotten as much ecological research, and what little has been done may not be adequately represented in the literature (Seigel 1993; Bonnet et al. 2002; Maurya et al. 2017; Maurya et al. 2020; Nishad and Vipul, 2024).

Almost all vertebrate species on Earth have rare albinism, and wild animals continue to exist in the wild despite this seemingly unfavorable condition (Gamble et al., 2006). Animals that are albinistic exhibit both positive and negative reactions to their traits. Herpetologists hypothesized that, in addition to heredity, albinism may manifest due to genetic mutations, diet, living circumstances, poor habitat, age, illness, or trauma (Sage, 1962; Hayley McCardle, 2012).

Over the past century, there have been sporadic reports of albinism in reptiles (e.g., Hensley 1959; Dyrkacz 1981 and references therein). However, multiple reports for a single species continue to be the exception rather than the rule (Bechtel and Bechtel 1981; Krecsák 2008). The primary cause is the rarity of albinos; in wild populations of a given species, as few as 1 in 30,000 individuals may

Comment [A3]: Many species are always registered. The number of reptiles and amphibians registered in India is much greater than this number, considering that the study dates back to 2011. Please check the numbers from several sites such as: 1- The Reptile Database
: <https://reptile-database.reptarium.cz/search?search=india&submit=Search>
2- <https://worldrainforests.com/03reptiles.htm>
3- https://amphibiaweb.org/cgi/amphib_query?rel-isocc=like&orderbyaw=Order&where-isocc=India

have the condition (Bechtel 1995).The rarity of albinism in snakes is reflected in the limited data available, highlighting the need for further research in this area.As far as albinism is concerned, certain snakes are frequently only known from one or a small number of specimens. Still, there is little information on albinism in animals, particularly snakes (Nivalkar et. al. 2012Kumbar et. al. 2016; Takhur 2018; Fellows 2018; Maurya et. al. 2020; Deshmukh et. al. 2020; Dethe and Ranshoor,2021).

Methodology:

The reconnaissance survey in the Lacchiwala Range of the Dehradun Forest Division aimed to explore its diverse habitat and potential wildlife species. During the survey, an albino snake hatchling was found on the Dudli-Doiwala road, in a vulnerable position that posed a high risk of mortality due to vehicular traffic. To mitigate this risk, the hatchling was promptly and carefully relocated to a safer nearby area within the same habitat range, minimizing stress and harm. Detailed notes and photographs documented this sighting and relocation, contributing valuable data for ongoing wildlife monitoring and conservation efforts in the Dehradun Forest Division.

Result and Discussion:

The discovery of an albino *Oligodonarnensis*, commonly called the kukri snake, in Uttarakhand is indeed a significant find. On March 10, 2023, a rare albino snake hatchling was spotted on the Dudli-Doiwala road, within the jurisdiction of the Lacchiwala Range, Dehradun Forest Division, Uttarakhand (Fig.1). This young snake, measuring approximately 5 inches in length, displayed a unique cream coloration, contrasting the typical black to dark brown hues commonly reported for the species in the region (Fig.2& 3). Fortunately, the snake was safely rescued from the road and subsequently released back into the nearby forest area, ensuring its safety and the continuation of its natural life cycle in its native habitat. Such occurrences highlight the rich biodiversity of the area and the importance of wildlife conservation efforts.

Conclusion:

Documenting this occurrence contributes valuable information to the herpetological community and aids in understanding the genetic diversity and adaptability of the species. It also highlights the importance of biodiversity conservation, especially in regions like Uttarakhand, which are rich in wildlife but face threats from habitat loss and climate change. By increasing our knowledge of local

Comment [A4]: In Herpetology, we determine the coordinates of the site, height above sea level, habitat, and determine the taxonomic key used to identify the species.

Comment [A5]: Can the basic taxonomic characteristics of the species be mentioned in its natural state, and were measurements other than length taken?

species, we can better implement conservation strategies to protect these ecosystems and ensure their resilience in the face of environmental changes.

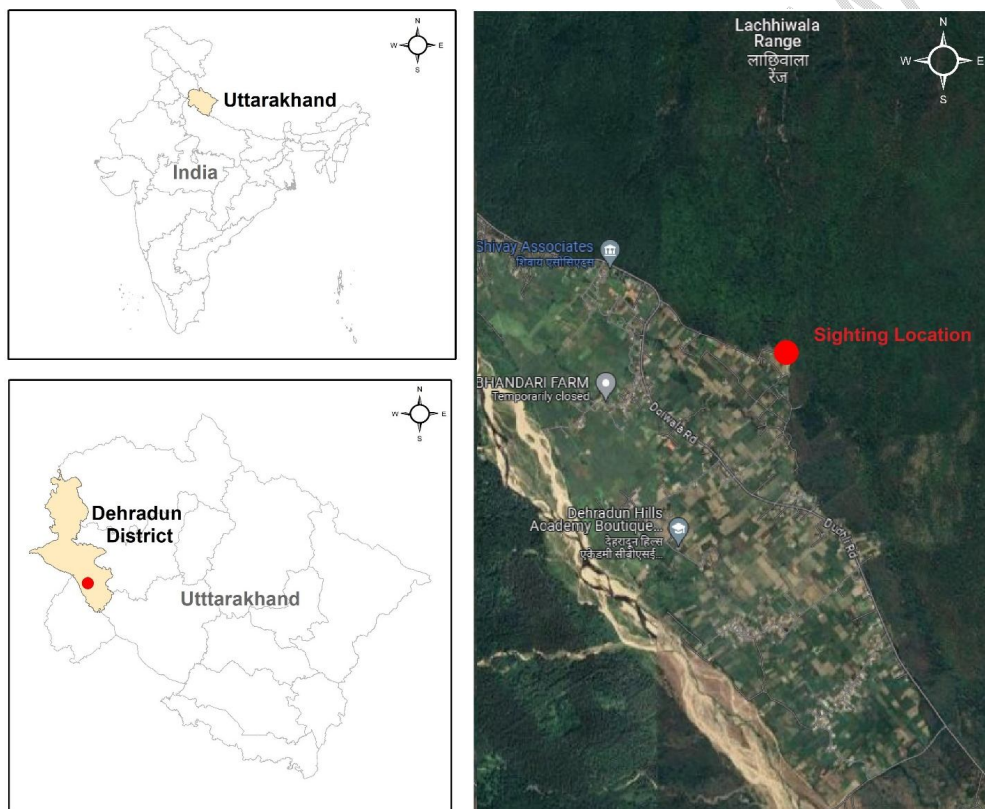


Fig1: Map of the sighting location



Fig 2:A typically coloured Common Kukri Snake (*Oligodonarnensis*). Photo by: Aditya Tiwari



Fig 3:An albino Common Kukri Snake from Uttarakhand. Photo by: Pravesh Kumar

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