



Status Report: King Cobra *Ophiophagus hannah* (Cantor, 1836) (Reptilia: Elapidae) in Mizoram, North East India

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Abstract

King cobra *Ophiophagus hannah* (Cantor, 1836) is a fascinating snake found in India. This is a largest venomous snake which feeds on other snakes, dwelling in deep forests and rarely encountered near human habitation. This is not a very common species of snakes in India. King Cobra is a protected reptile in India under Wildlife (protection) Act, 1972, and hence, any sort of killing and capture is prohibited under the law. Author has encountered some instances of this snake being killed for various reasons in many remote areas of the state. The fact is based on personal observations and other published reports. Main purpose of the paper is to highlights the status of the snake and its conservation needs.

Keywords: Status Report, King Cobra, Mizoram, North East India, Conservational needs.

Introduction

King Cobra *Ophiophagus hannah* (Cantor, 1836) is an elapid reptile and its distribution range has been reported in Western Ghats (Karnataka, Goa, Kerala, Tami Nadu), Himalayan foot hills, including Terai of UP, Bihar, Assam, Bengal, Orissa, Andaman Islands, entire North East India, up to Indo China and Indo Malaya to Indonesia¹⁻⁷. The species has been well documented from different parts of Mizoram⁸⁻¹².

It is the largest venomous snake in India reaching more than 15 feet in length¹⁻⁷. A specimen of 18 feet and 4 inches (5.5 m) has also been recorded¹. This is a dense jungle dwelling snake with heavy rain fall, up to 7000 feet from sea level. It has also been observed in Grasslands of Manas Tiger Reserve of Assam¹³.

King Cobra is a protected reptile in India under Wildlife (protection) Act, 1972, and hence, any sort of killing and capture is prohibited under the law. It has been observed that this jungle dwelling snake is killed for various reasons in the area. Mizoram is one of the North Eastern Hill states of India. It lies between 21^o58'-24^o30'N latitude and 92^o16'-93^o25' E longitude, with an area of 21081 sq. km having rich biodiversity. Geographically on Indo Myanmar region and falls under one of the biodiversity Hot Spots of India / World. The report is based on personal observations and other published reports.

Main purpose of the paper is to highlights the status of the snake and conservation needs.

Poison of the King is similar to that of Common Cobra *Naja naja*, but less toxic in nature^{1,4,6,7}. King strikes hard on victim and can hold nearly for 8 minutes⁴ to ensure injection of full

dose. A King can inject up to 7 ml of poison at one bite⁷. It is indicated that it could discharge 10 lethal doses in one bite on man^{1,6,7}. It is written⁶: "Theobald (*Capt. Rept. Brit. Burma*, 1868, p.61) records, on the information of a Burman, an elephant being bitten on trunk by a hamadryad (King Cobra) whilst browsing on some foliage, with the result that death ensued in about three hours". It causes death by paralysing the respiratory centre in brain⁶. Blood discharge is less than that of Cobra bites. Death may occur in 15 to 20 minutes or more¹. But deaths in King Cobra bites are very rare as it avoids human contacts and inhabits in deep and dense jungle⁷. No anti-venom serum is available in India, but manufactured in Thailand^{1,7}.

Habits: The snake feeds on other snakes preferably large snakes including poisonous snakes^{1,2,4,7}. It is mentioned⁴ that they can detect and avoid poisonous snakes and can swallow fairly large snake in comparison to their own size. It is observed that 9 feet 2 inches python is swallowed by a 12 ft long King Cobra. It is further stated⁴ that King Cobra has a meal once in a week, and consumes large number of snakes during winter. Dead meals are also accepted in captivity¹⁴.

The King Cobra is known for its aggressive nature, courage and quick in attack. The King Cobra is however reluctant to attack unless provoked or harmed. Snakes normally attack in defence and in its own protection. The snake sometimes attack even without provocation and instances are known of jungle paths being closed to traffic due to the presence of aggressive King, which is dependent on individual temperament¹.

Legal Protection to King Cobra: King Cobra is a protected elapid reptile¹⁵, under Wildlife (Protection), Act 1972, and has been listed in Part – II of Scheduled – II, of the Wildlife (Protection) Act, 1972. According to this act, 'no person shall

hunt any wild animal specified in Schedule I, II, III and IV, except as provided under section 11 and section 12.1'. Any person, who contravenes the provision of the act, shall be liable to be punished with imprisonment, which may be extended up to three years or a fine which may be extended up to Rupees 25 thousand or both.

Identification: This is a very robust snake with shining and smooth scales on body. Head is broader than neck. Scales are the identification aid to snakes. Fore body raises as hood on provocation which has less dilation as that of common Cobras. They have rounded snout, eyes are moderately round with round pupil. They differ from other Cobras in having two large Occipital shields behind parietals and absence of Cuneate scale on infralabial (lower lip), which is present in common Cobra. Body scalation is 15: 15: 15. Colour of the body normally observed is brown gray or dark brown or yellow brown having broad yellow or white bands on the dorsal sides of the body. Adults with entire bluish black colouration, without dorsal bands on body have been reported from Arunachal Pradesh⁷, similar type of the colouration has also been observed on King Cobra for the first time from Mizoram, North East India¹⁰.

Methodology

The study was conducted on observations made while conducting surveys on reptiles and beetles in Mizoram state in North East India, and information's available in news papers and published reports on king cobra in the state.

Results and Discussion

In spite of the Wildlife (Protection) Act, 1972 in force in the state and listing of King Cobra under Part II of Scheduled II of the Act, It has been observed that this jungle dwelling snake is killed for various reasons or due to ignorance of its importance in wild and the silent services rendered by the king to mankind and the consequence of its capture and killing in the area. Some of the incidents observes, are as given below.

In first instance on 6th June 2009, a female King Cobra was killed by gun-shot, by a villager from 'Hmunhmeltha' village of Champhai district, who was working in field, in defence of his younger brother. The snake received a shot just behind the neck and was killed.

There was another King nearby, escaped, presumably male, guarding the nest, having eggs. The matter was reported to the Forests department and action was taken. King and eggs (Figure-1 and 2), numbering to 55, were taken into custody 6 eggs reported damaged by the gun-shot, the total clutch size reported was 61, which is a record clutch size of King Cobra from the state of Mizoram⁹ and appropriate legal action was taken against the person who killed the King. In this case Government appears to be very alert and active in protection of the endangered animals and various faunal conservation aspects.



Figure-1
Head Scalation and Shot on King Cobra



Figure-2
Captured 55 eggs of King Cobra

Second case: Second case is based on Mizoram daily news paper 'Vanglaini' dated 22nd June 2010¹⁶ (Figure-3). According to that, a full grown female, guarding her eggs was seen at a place 'Liabual' on 8th June 2010 and was photographed. Another similar case, a female guarding her eggs was observed at a place 'Sakaihzawl' on 19th June 2010. Later unconfirmed report says that after being in news, people visited the place and thereafter the female and the eggs were found missing. Probably female may have been disturbed and eggs may have been damaged by unaware people or by any means nest of the king may have been damaged by the afraid people of the area. This is again the matter of ignorance of reptile conservation issues in the state.

Third case: A complete black coloured stout bodied king cobra of 2.30 meters having shining scales was killed (Figure-4), probably for table purpose, on 13th May 2011, observed at New Champhai of Mizoram, North East India. The snake was killed in deep forests and was brought at New Champhai. Author came to know of the King, which was carefully observed and was

found to be a King. The head was crushed but intact for scale identification. This was the first report of occurrence of Melanistic King Cobra from the state of Mizoram, North East India¹⁰.



Figure-3
Melanistic King Cobra, Head region

Fourth case: Another matter was observed at ‘Mualkawi’ Village of Champhai district of Mizoram, North East India (exact date has been misplaced), where a full grown skin of King Cobra stuffed with some filling material was left for sun drying on a heap of fire wood under sun (Figure-4, 5, 6). On the basis of its length, stoutness, bands on skin and shining scales it was not difficult to identify, as King Cobra. Locally King is called as ‘Rulngan’. On enquiry, I came to know that the flash was taken out for table proposes and the skin is used as trophy for decoration.



Figure-4
Filled skin of King Cobra on firewood



Figure-5
Head bands on Kings fore body



Figure-6
Head bands on Kings fore body

Conclusion

Many large snakes feed on rodents, insects, lizards, eggs of birds etc. The preferred diet of large bodied snakes like rat snakes and many poisonous snakes is mammalian diet which includes mice and rodents. These, on the other hands are pests of agricultural and forests significance. Snakes silently render their valuable services to mankind, in controlling insects and rodent pests of our crops of agriculture and forests, especially in hilly areas where terrine is difficult to approach.

King Cobra is a very important ecological link, keeping the overpopulation of other snakes under check, hence contributing a lot in maintaining ecological balance of the area. King Cobra a largest venomous snake and there is no anti-venom available in

India, yet death cases of the bite of King are not very high in India, reason being its jungle dwelling habit, away from human habitation. This is a protected elapid snake species under Wildlife (protection) Act, 1972, and Government in this state, is very alert and active to provide full protection and conservation to the species, as in first case, but in spite of the efforts of the government and some NGO's working for wildlife protection and conservation, some killing of wild animal go unnoticed in some interior places of the state, which is very damaging to our ecosystem and bio-resources of the state.

This is therefore urgent need to make the people aware of the consequences of its killing and capture in any way, and the valuable silent services rendered by the King to mankind, so that this very significant species of King Cobra, faces no threat from mankind and conserved well in the area.

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