

BINOCELLATE COBRA

By Shekhar Nath Roy

Binocellate Cobra (Naja naja) is one of the most poisonous snakes of Bangladesh. Other poisonous snakes are King Cobra (*Ophiophagus hannah*), Common Krait (*Bungarus caeruleus*), Banded Krait (*Bungarus fasciatus*) and Russel's Viper (*Vipera russelli*). About 27 species of snakes are found in our country (Khan '1982) but most of them are non-venomous. Only the above mentioned 5 species of snakes are venomous. There are 2 subspecies of Cobras in Bangladesh - Monocellate Cobra (*Naja naja kaouthia*) and Binocellate Cobra (*Naja naja naja*). The distribution of the second one is countrywide.

Identification: The Binocellate Cobra is medium to big-sized. Its scales are smooth and bright, its head and neck are wide, a wide black spot is present below the neck, a conspicuous hood is present above the neck and its average length is 1 meter. The average length of a male snake is 2 meters and the length of a juvenile snake is 25 cm when it is hatched.

Structural description: The scale of the Cobra is smooth, its eyes are black, the head and neck are wide and the body is medium in size. It is black, dark brown or yellowish in color. The ventral side is generally white or yellowish and some wide black spots are seen below the neck. The dorsal side is usually white or yellow spotted. Two ring-like markings are seen on the hood of the Binocellate Cobra when the hood is spread. Sometimes these markings seem to be like spectacles, often they may be absent. The Cobras of North-western India are black and their markings are inconspicuous. Indian Rat snakes (*Ptyas mucosa*) are often mistaken as Cobras. But its neck and head is narrower than that of the Cobra, moreover, it is 1 meter longer than the Cobra.

Range & Distribution: Cobras are found in every village of Bangladesh. They are also found in India, Pakistan, Nepal, Thailand, Myanmar and some other countries of the South-Asia.

Habitat: Cobras are found mostly in the districts of Bangladesh where paddy grows. Because rats are the main food of cobras, they live near to rat-holes. The number of cobras grows with the number of rats. Cobras like to live in granaries, termite mounds, earth dams, piles of bricks and stones and other dark moist places.

Habit: Cobras like to stay in rat holes of the rice fields. They spread their neck bones to form hoods when they are annoyed or attacked by man or some other animal and stare at the enemy opening its bright eyes at the two sides of the hood. If they are excited more, they hiss by throwing the air through the glottis of their oral cavity. Some of the African species of cobras are able to spit the venom from its mouth through the air upto a distance of 2 meters. Cobras of north-eastern India can throw their venom on their enemy through fangs. Cobras like to hunt at dawn and dusk. Like others species of snakes Cobras are also more active during the rainy season, as it is their breeding season.

Food: Baby Cobras feed on insects, reptiles, frogs, toads, and small snakes of other species. When they become adults they eat bigger animals such as rats, frogs, toads, and various species of birds. This snake has been seen to eat monitor lizards also. But in that case, it holds its enemy firmly and starts swallowing it after its death.

Reproduction: The female Cobra generally lays 12-30 eggs between the month of May to June in rat holes or termite mounds. She guards the eggs until they are hatched for about 60 days and does not take any food. The young cobras look like adult ones. They possess poison from their very first day of life. But enough poison is not secreted from their fangs at this stage. The quantity of

poison increases as these young Cobras grow. Young Cobras move separately after 2 to 3 weeks of their birth. Sometimes more than one female lays eggs in the same hole. Cobras can produce several times in a year like other species of snakes.

Ecological position of Cobra: Cobras are killed for their beautiful skins in many countries of South-east Asia including Bangladesh. Although it is illegal, thousands of cobra skins are processed in many tanneries and marketed countrywide everyday.

Structure of the venom: Cobra venom is transparent, pale yellow in color and a little sticky. Some enzymes with mucus are present in it. The venom becomes turbid if it comes in contact with sunlight. The stickiness of the venom depends on seasons. It is most sticky during the winter. The venom affects the nervous system if cobras bite anybody. As a result the victim can be paralyzed, he may even die due to heart failure. Generally the snake applies less venom than the quantity of which can cause serious effect. In spite of this the victim should be given immediate treatment. Some scientists of Tata Memorial Cancer Institute of Bombay in India have found through research that the molecules of cobra-venom can destroy some cancer-cells inside the body of rats. Some pain-killers have been made from cobra-venom called Cobroxin and Nylosin in USA.

Methods of venom

sheet is attached firmly to collect the poisonous snake is and its mouth is rubber sheet that the bite in it fang. I s d on its gland in this venom is through the hollow piercing the rubber. Usually more venom is snakes than the female ones. More venom is collected during summer than in the winter.

collection: A thin rubber on an empty biker in venom. Then the caught by hand pressed on the in such a way snake can with its Pressure increase v e n o m position and gathered in drops pore of the fangs sheet in the biker. collected from the male ones. More venom is

Antivenom serum: The serum, which is able to neutralize the snake, is called Antivenom or Antivenin. This serum is made in the Haffkine Institute of Bombay in India. At first a highly diluted solution of the venom of these snakes is injected in the body of a horse. The dose of the venom is increased gradually. Some blood is collected from its body when its immune system is grown properly. Only its liquid and watery part is collected avoiding the blood cells. Afterwards it is cooled and concentrated and is changed into crystals and powder. This powder is marketed in a quantity of 10 ml as antivenom and it acts against the venom of the above 4 species of snakes. Except Haffkine Institute, antivenom is also made in the Central Research Institute at Kasauli of Himachal Pradesh in India.

Identification of snake bites: Ideas can be made as to whether a venomous or non-venomous snake has bitten the victim by observing the bitten area of the victim. Two deep wounds of fangs are seen if a venomous snake bites. But a series of wounds of small teeth is seen at the biting area of the victim if a

venomous snake bites, as many small teeth are arranged at the two mandibles of it. In this way bites of venomous and non venomous snakes can be identified by observing the wounds.

First aids for a Snake-bite: Most snake bites are not serious or deadly. The reaction of the venom depends on the quantity which has entered the body of the victim. The people of our country are afraid of any kind of snakes - venomous or non-venomous. So as soon as a snake bites a person, the victim thinks that a venomous snake has bitten him. As a result he faints in fear. The victim should never be excited, moreover he should be given courage to be mentally strong. A strong tie on the hand should be given if the victim is bitten on the hand; a tie should be given on the knee if the victim is bitten on the leg. The tie should be strong enough to resist the flow of blood. If only one finger can enter through the tie, it can be realized that the tie is tight enough. Courage should be given to the victim so that he is not afraid. In order to do this he can be given an aspirin tablet or some brandy or a harmless injection. The victim should be transferred on a stretcher or a bed to such a health centre or a hospital where antivenin serum is available. The victim, he should be tilted at a side so that he does not cough and can breath easily.

Popular beliefs about Snakes: Some of these popular beliefs and their scientific explanations are given here-

(i) It is said that snakes are revengeful. People believe that if anybody kills a snake, its companion follows him to take revenge and afterwards bites him. In fact if a snake is killed, some musk-smelled substance secretes from its anus and its mate follows the smell.

(ii) Snakes are fond of milk or the proverb "taking care of a snake by giving it milk and banana" is often heard. But snakes have no real organ to suck milk; rather it has a number of small teeth. On the other hand, snakes are not vegetarian to eat banana.

(iii) Many people think snakes dance hearing the music of the flute of snake charmers. But modern researches prove that snakes can hear some air borne sounds vibration by its tongue, but they do not react to hearing any music. Moreover, they have instincts to avoid hearing artificial sound waves. The shape of the flutes of snake charmers only attracts the snakes while the music of the flute attracts the audience.

(iv) Many people think that valuable stones are found on the head of the snakes. In fact if it were true, snake charmers would be very rich.

(v) It is said that if a common Sand Boa (*Eryx conicus*) licks the body of a person, he is attacked with leprosy. In fact the scales of this species looks like the skin of a leprosy patient but this snake is clean and free of germs.

(vi) The Common Krait (*Bungarus caeruleus*) is said to stop the breathing of a sleeping man. In fact the human respiratory system is paralyzed if this snake bites a man.

(vii) Some people believe that snake-spells and roots of some plants act as medicine of snakebite. But Antivenom serum is the only effective medicine of snakebite now a days. Such spells and roots can free the victim from fear or mental shock, but it is never a substitute of antivenom.

(viii) Many people often mistake the Red Sand Boa (*Eryx johnii*) as the snake with two mouths. In fact, the tail of this species is not pointed, but blunt which is often mistaken as the head even by mongooses or other predators and they attack it at the tail. Then this snake is able to escape quickly.

By Sanchari H. Akram

I noticed this article 'Blood is redder than anything' written by Mr. Mohd. Shahidul Islam (Titoo) in the 'Controversy' section which is a disagreement to my previous article 'Is it a shame; or intense dislike or hostility' published as a rejoinder to Mr. Titoo's first article 'What a Shame' 'Shame' in the 'RS'.

Replies to my observations Mr. Titoo has once again gone to the extent that only showed his 'repugnance and extreme antagonism' against the country 'Pakistan' (well, not their cricket team this time). To validate his hatred, he again brought up the 'genocide and in-human atrocity' done by the 'Pakistani Junta' during our great liberation war of 1971. In his 'fiction' (which he mentioned his article was) he at first visualized 'Yahya Khan' at the Dhaka stadium among the thousands of cheering crowd, and now to him all the Bangladeshi who supports Pakistan cricket team have no nationalistic responsibility and they are showing disrespect to their motherland. He has brought other irrelevant matters to support his controversy. At first, I thought I would not comment as I have clearly put my stand in my earlier article, but some new issues have been mixed up with my rejoinder. In fact, this time he has brought the whole thing to 'personal level' and questioned my affection and integrity towards our own country. Well, in that case I feel the readers should know about my side of the fact.

Let me start with 'people like us who (according to Mr. Titoo) have 'forgotten or forgiven' the dreadful past that had happened 29 years back and calling this a 'tragic history' only. Well, do you think any body can forget those 'dark days' when almost all the Bengali families in this country didn't sleep one single night without fear and agony? I was not born then, but know very well how one had to run villages after villages to find a secure place from the 'Pak Army' and their Bengali collaborators. In my article I mentioned 'forgive and forget' them, as a separate country who has equal respect for the sovereignty of our country. I also feel that 'Pakistan' should offer apologies officially for the act they had done. As I understand, it was not only the war of liberation, but even before that, a fraction of the Pakistani leader's attitude towards East Bengal or East Pakistan was rather one-sided. This discrimination led to the war of liberation and the Pakistani lost their important part (whose Bengali Muslims had actively fought in the Pakistan movement during 1940s). In deep inside, this 'defeat' will suffer every Pakistani for a long time. However, Pakistan have realized their mistake and since then is supporting Bangladesh in various respects officially or unofficially. After liberation, from Bangladesh side, a general amnesty was declared to the Pakistan Army (even to those 195 or so, war criminals) as well as their collaborators to prove our greatness and generosity. It may be also mentioned that during the occupation period in 1971, most of the people of West Pakistan were actually unaware of the 'sad incidents' that were happening here. Various political parties of Pakistan had condemned this 'barbarous attacks'. This was mainly done by a section of 'Pakistani Army' and 'politicians' that should be blamed for this fascism, not the entire Pakistani people. History has trashed these so called 'Army monsters' and 'evil politicians/collaborators', but will always cherish the names of the martyrs, general mass, students, Bengali Police, EBR members and Army, freedom fighters along with the leaders who gave birth to an



Reply to - Blood is redder than anything

independent

nation, Bangladesh.

Now, why people in Bangladesh mainly support the Pakistani Cricket team is a principle concern of Mr. Titoo. I think he should go for an opinion poll. A reason could be that they are definitely a well-balanced team and they have world class players. After 1971 a large number of players from Pakistan participated in various club tournaments of Bangladesh. This helped to improve our youngster's performances and Pakistan is one of those test-playing nations who have actively supported Bangladesh to join the test-playing families of the world (these are my main reasons of supporting Pakistan Cricket team). They have also offered to play a 'first test match' with Bangladesh. For the other reason (If I am to give my personal opinion; from reading books of the past, and also learning from the senior members of my family), I should refer back a little to the history of this sub-continent. The British entered this sub-continent as a 'Trader' and made their way as 'Rulers of India' by playing disgusting and cunning diplomacy. Patriotic people, regardless of their religion and cast wanted freedom from the 'British Raj'. A

time came when the Muslims of India opted for a separate Muslim land. In this movement, eminent Bengali leaders along with thousands of general Muslims fought together to create Pakistan in 1947 and the part of

Bangladesh was named as East Bengal, a province of Pakistan. But, soon after independence from the British; we realized that a section of the Pakistani rulers had neglected us in every respect. As a result, the Bengali community wanted freedom from Pakistan (except a few Bengali collaborators), which finally came into being in 1971. Obviously, before 1971, being a part of Pakistan, Bengali peoples supported Pakistan team and some of our players even played as a Pakistan team member. Now, (as partly agreed by Mr. Titoo) supporting them (when it plays country, other than Bangladesh) could be a reason that Bangladeshi who had once fought for Pakistan and inspite of all these 'bitter memories', showing their broadness and accepting them as fellow brothers. Although Mr. Titoo meant globalization as domination, I think globalization of cricket in a healthy atmosphere will unquestionably bring equality, honor and respect among the world cricket family and will bind them into brotherhood regardless of whatever their personal opinion could be.

Mr. Titoo has pointed out the nationalistic feelings of a 'Rickshaw puller' of Pakistan and vice versa (India). Well, don't you think when Bangladesh play with any country anywhere in the world, every Bangladeshi supports their own team? Certainly they do. I can't forget the victorious Bangladeshi crowd I witnessed in the TV while our team defeated Pakistan and Scotland in the last World Cup and while winning the 'ICC cup' in Malaysia. You have mentioned that those who are chanting 'Pakistan Zindabad' with 'small flags' should keep the hatred open. Well, hatred and love can't go together and this was shown in yesterday's match of Pakistan and India in the Dhaka stadium. I can assume that the supporters were 50-50 and they all cheered when any of the players of either team did well. I have noticed even bigger Pakistani flags as well as huge Indian platoon and festoons. Doesn't that tell you how broad minded and adjustable cricket lovers we are? I think Mr. Titoo's understanding of the Bangladeshi people (as mentioned by him) is completely biased, immature and baseless thesis, which will definitely 'hurt' the feelings of millions of patriotic Bangladeshis. I don't think showing 'only hatred' towards Pakistan will increase our nationalistic feelings and some of us will become real patriot (as suggested by Mr. Titoo). Rather, real patriotism will come when we can go ahead with equality in power, share and respect with every country of the world. Being a proud Bangladeshi, I believe, we should concentrate in not letting our country to become once again a Colony of any other country (not only politically, but in every respect). We should keep our self-esteem high, encounter terrorism, increase economic growth, eliminate poverty, illiteracy and improve the health conditions of the general mass.

In conclusion, once again I request Mr. Titoo to come forward with 'open mind and love' and encounter his feelings of 'hatred'. He mentioned that he is 'not a prophet', but all the 'prophets' were human beings and they have all preached mainly one thing: 'love, forgive and forget' through their 'Holy books' regardless of their religions. I would also request him to refrain from commenting to someone's affection for his/her country and be kind enough to stop observing the whole thing through his narrow-minded outlooks.