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NOTES ON ECOLOGY AND BIOLOGY OF SOME REPTILES OCCURRING IN AND AROUND NANDANKANAN BIOLOGICAL PARK, ORISSA

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(With 4 plates)

Six species of reptiles occurring in the Nandankanan Biological Park and its surroundings were collected and studied in the laboratory excepting *Varanus salvator* (Laurenti) which is not occurring in this region but has been kept in this park. The results of these observations are summarized.

The Nandankanan Biological Park is situated in the most natural surroundings of the green forests of Chandaka near Bhubaneswar. The facilities for studying reptilian ecology and biology are consequently good. The main advantage of this park is its natural setting of forests and the central lake with its flanking swamps and marshes. As the park is not enclosed by a boundary wall, but only by a barbed-wire fence, many reptiles enter the cage and the enclosures at night. The northern and western sides of the park are hilly with bushy forests.

Some of the observations made are not new but serve to confirm previous observations. We intend to continue this work on other species of reptiles occurring in this area.

Family COLUBRIDAE

Enhydris enhydris (Schneider)

(Oriya name : Dhanda Sap, Pani Dhanda, Mati Birali)

Distribution.—This species is distributed throughout north eastern India and in the south up-to Vizagapatnam District. It occurs all over Orissa.

Habits and Habitat.—These snakes are fairly common in ponds, irrigated fields, and sluggish waters. They occur in the central lake of Nandankanan Biological Park and in the water logged marshes and swamps near about. Some specimens of this species were kept in captivity. Here they are generally seen at the water edges with tip of the nose sticking out and the remaining portion of the body lies inside water. With some disturbance they sink down and swim away. Some were seen completely submerged in the water where as some were seen on the land near the water basking in the sun during January, 1974.

Food.—The snake feeds principally on fishes and frogs but one from Barrgkok disgorged a skink (Smith, 1945).

Observations.—On 14.6.1973 at about 5 p. m. on the road near the Museum of Nandankanan at a distance of about 160 metres from the border of the lake one *Enhydris enhydris* was detected laying live young snakes one after another. The snake was lazy and sluggish. Its hind part near the vent was bulged out and a portion of the tail of a young snake that was being born was visible out of the vent. As the mother moved slowly forward, one after another young ones were being dropped and left behind. It took about half an hour to give birth to ten young. The bulged hind portion above the vent contracted while giving birth. There was no attempt of parental care. The young first moved a little and then remained still before they made another attempt to move. They were wet and encased in thin membranes which were lost. The colour pattern was prominent and distinct. After giving birth the mother remained almost still probably due to stress and exhaustion and could not be induced to move even when pocked with a stick. Then it was collected and preserved. After autopsy, four more young ones were recovered from the mother's body cavity starting from the 100th ventral scale to vent. The fourteen young measured 175 to 185 mm. The colour pattern of the adult female was fainter than the young ones.

Another female of this species caught on January 25, 1974 contained 29 eggs of the following sizes 20 mm. × 11 mm., 16 mm. × 10 mm. and 9 mm. × 7 mm. between 104th to 142 nd ventral scale of the body. The specimens are deposited in the Z. S. I. collection.

Measurement and scale count of two females.

Sl. No.	Details	No. I	No. II
1.	Length-snout to vent	406 mm.	615 mm.
2.	Length-vent to tail tip	98 mm.	120 mm.
3.	Ventral scales	151	157
4.	Subcaudal scales	50	49

Parasites.—Some nematodes belonging to the species *Tanqua anomala* (Linstow), Baylis, 1916, were found in the empty stomach of the mother snake.

Remarks.—Though *Enhydris enhydris* is mainly an aquatic snake it has to come to land to give birth. This breeding habit indicates that it was originally terrestrial, but subsequently changed to an aquatic habit. It gives birth six to eighteen young at a time (Smith, 1943). These two observations suggest that the breeding season may be from January to June.

Family COLUBRIDAE

Ptyas mucosus (Linn.)
(Oriya name : Dhamana Sap)

Distribution.—The species occurs throughout India and the Andaman Islands. Outside India, it occurs in Yunnan, South China, Hainan Indo-China, Java and Sumatra. It is common throughout Orissa.

Habits and Habitat.—They are very swift snakes found here and there inside the park. They are mostly found around aviaries of small birds such as Budgerigars, Quails, and Bulbuls. Here these snakes feed on the birds and rodents which in turn feed on the food of birds. Sometimes they are seen moving along the wire netting walls in search of a hole. Many have been killed in these aviaries. Many were seen beneath heaps of stones. Some were seen basking in the sun inside the deer paddock during winter mornings but ran away upon slight disturbance.

Food.—Though rats and frogs are its main food, the snakes do not seem particular in its choice of food. On autopsy rats and birds have been recovered from the stomach of some of the rat snakes. Once four Budgerigar chicks were regurgitated by one snake when it was caught.

Observations.—One rat snake collected in the park on 4.7 1968, was kept in a wooden cage and laid 11 eggs on 18.7.1968. The eggs were white, soft shelled, shrunken and elongated with blunt ends. These 11 eggs measured 50 to 52.50 mm. × 27.50 to 32.50 mm. (Pl. IV, 2).

Another female specimen killed in the park on 27·5·1973 After dissection it was found to contain two sets of ovaries with several advanced egg follicles and in the oviducts some small eggs.

A baby rat snake measuring 576 mm. was caught from the lawns or the garden on 30·8·1973.

Two rat snakes of unknown sex were fighting near the nursery garden of Nandankanan on 1·8·1973. These two snakes were in an area

of about 10 metres × 10 metres from 10 A. M. to 4 P. M. Both were twisted on each other. The heads were facing each other with a space of a few centimetres in between them. The heads were about 45 cm. above the ground. There was continuous twisting movement of both snakes for several minutes at a time inside bushes and grasses. Some times they break apart and again repeat the same type of fighting.

They ignored the presence of human beings at a distance of about 6 to 7 metres.

Parasites.—Nematodes from the lungs of two rat snakes killed on 26·12·1972 and 27·5·1973 were recovered.

Remarks.—According to Smith (1943) mating of this species takes place in hot weather, May and June, eggs 6-14 in number are deposited in August and September, the young emerge between the end of September and December. The eggs measure 45.50 mm. × 30.40 mm. and the new born young measure 370-380 mm. (Smith, *loc. cit.*) Nicholson (1893) gives the egg depositing time of Bangalore population as May to September, 7-13 in number.

From our above mentioned observations on egg size of the second female, it is persumed that the mating may start in May and from the observation of the first female, the egg depositing time can be said to be July. In our collection the size of the eggs are also little larger. Wall and Bvans (1900) noted the incubation period of a brood of eggs and Derianiyagale (1960) observed the mating behaviour. However a brood of nine eggs recorded by Wall (1907) from Fyzabad agrees approximately (2″-2½″ × 1½″).

Since mating of this snake takes place in hot weather May and June (Smith, *loc. cit.*) this fighting behaviour observed in August may be the struggle of two males. Carthy (1964) mentioned about such a behaviour among sand vipers as struggling between two males and Schmidt & Inger (1957) is also being referred in this connection. However Prater (1933) mentioned about a sex play of a pair of this species in which case the female contained eggs in advance stage.

Family Boidae

Python molurus molurus Linn.
(Oriya name: Ajagar Sap, Boda Sap)

Distribution.—Range: India, Peninsular India to the North East, West Bengal and to the West Punjab and Rajasthan. Outside India, Sind and Punjab or Pakistan, Sri Lanka and Bangladesh.

This species occurs throughout Orissa. It has been collected from Puri, Cuttack, Mayurbhanj and Phulbani Districts for this park. Mani-

bhadra Pahad (Hill) near Gonia in Puri District is well known for its occurrence.

Habits and Habitat.—In captivity they remain coiled up in a corner of the house during the day but move often late in the evening and at night. Often they are completely or partially submerged in the water tank. Most of the baby Pythons collected from the aviaries were found early in the morning. During July, 1971 to September, 1971 we could collect 7 baby pythons and 4 baby pythons were collected during the period from July, 1973 to October, 1973 from an aviary of small birds situated just at the edge of portion of the lake which is full of submerged grasses, marshes and bushes. One python was seen inside heaps of laterite stones and bushes in a hillock at Barang about 2 Kilometres from the park. This was caught by the workers of Barang glass factory and sent to the park on 4.1.1974.

Food.—Pythons can take any manageable animals and birds. Generally they prefer live ones but dead birds and small animals have also been accepted in captivity. They have been observed taking the common langur, ducks, common goose eggs and a number of species of other birds. In captivity they are generally fed with live fowls, pigeons and guineapigs.

While clearing the forests for the construction of buildings one python was seen swallowing a young spotted deer in the forests near Bhubaneswar during the year 1957-1958. (Pl. V).

Feeding mechanism of one year old baby python was studied by supplying immobilised sparrows (Pl. VI).

Observations.

Table—1. The weight and size of eight large pythons received so far in this park.

Sl. No.	Weight in kg.	Maximum circumference in cm.	Length tip to tip in cm.
1.	33.5	45.5	435
2.	37	—	396
3.	21	—	396
4.	30.500	—	411
5.	—	—	435
6.	29.4	38	465
7.	10.6	28	288
8.	11.4	26	284

No python longer than 465 cm. has been recorded in this Park or in any part of Orissa.

Table—2. The details of four baby pythons recently collected from a aviary of the park.

Sl. No.	Date of collection	Length in cm.	Circumference in cm.
1.	17.7.1973	79	8
2.	5.8.1973	80	8
3.	14.8.1973	81	8
4.	16.10.1973	90	9.5

The details of collection of some of the pythons from Nandankanan park area as follows :

(a) One was collected on 7.4.1966 while swallowing a common langur at the bank of the lake underneath a tree.

(b) One was caught in May, 1966 in a fishing net while it was taking a duck inside the lake.

(c) One was caught on 25.4.1971 from the common goose enclosure where it was lying coiled up after taking four spoiled common goose eggs. All the four eggs were regurgitated out after catching it.

(d) Seven were caught during the period from July, 1971 to September, 1971 and four were caught during July, 1973 to October, 1973 from an aviary of small birds such as bulbuls, mynas, doves and barbets where they devoured some of these birds. Most of these birds were regurgitated soon after the snakes were caught.

(e) One was collected on 1-10-1969 from the oven (chulla) of Zoo kitchen.

(f) One was collected from submerged grasses inside a portion of the lake in August, 1973.

The monthly distribution of python collected or received in the park including 20 collected from this park area itself is as follows :

January	— 7	May	— 1	September	— 5
February	— 0	June	— 2	October	— 6
March	— 0	July	— 7	November	— 8
April	— 4	August	— 6	December	— 2

Total 48

From this it can be seen that inter sloughing period observed in one case was from 37 days to 128 days whereas in the other case it was from 31 to over 97 days. The process of sloughing was completed either in one day or within three consecutive days.

Table—3. The details of sloughing of the skin observed in two captive adult Indian pythons.

Sl. No.	Date of last sloughing	Date of subsequent sloughing	Inter sloughing period in days	Remarks
		Specimen No. I (Sl. No. 1 of Table I)		
1.	11.5.73 to 12.5.73	23.6.73 to 24.6.73	41	
2.	23.6.73 to 24.6.73	4.8.73 to 5.8.73	40	
3.	4.8.73 to 5.8.73	17.10.73	42	
4.	17.10.73	23.2.74 to 25.2.74	128	Winter
5.	23.2.74 to 25.2.74	4.4.74	37	
6.	4.4.74	30.6.74	86	Under incubation from 28.4.74 to 25.6.74.
7.	30.6.74	19.8.74	49	
8.	19.8.74	13.10.74	54	
9.	13.10.74	17.12.74	64	
		Specimen No. II (Sl. No. 6 of Table I)		
1.	14.11.73 (Date of Procurement)	20.2.74	97+?	Winter
2.	20.2.74	24.3.74	31	
3.	24.3.74	11.6.74	78	
4.	11.6.74	23.8.74	72	
5.	23.8.74	18.11 74	86	

Mating of a pair of Indian pythons was observed in the first week of February, 1974 in this park. The female measuring 435 cm., weighed 33.5 kg. and had a circumference of 45.5 cm. Whereas the male measured 288 cm. weighed 10.6 kg. and had a circumference of 28 cm. at the time of mating.

Parasites : Helminth parasites i.e., *Bothridium pythonis, Blainvilie*, 1824 and *Ophioascaris filaria*, Dujardin, 1845 (= *O. Ajgariasis*, Khera, 1954) were found on autopsy of this species in the park (Patnaik and Acharjyo, 1970).

Remarks.—Wall (1911 & 1912) dealt elaborately with the food and feeding habit of Pythons and some more information can be gathered from Candell (1913) Campbell (1923), Jerdon (1959) and Stewart (1917). Corbett (1957) encountered pythons which have swallowed cheetal and barking deer.

In respect of sloughing our observations shows that the inter sloughing period is longer during winter and hybernation period.

From the period of gestation and the season when eggs are deposited Wall (*loc. cit*) extrapolated mating seasons from December to February. In the Paris Zoo. they were observed to mate in January and February and eggs were deposited in May. Our observation of mating in the February confirms the same. It is interesting to note that the copulation takes place in the winter at the time of their hybernation. Vinger *et al.* (1970) has studied metabolism and thermoregulation of this genus during breeding.

According to Smith (1943) hatchling measure on an average 2'-5" (73.66 cm.). Therefore the above four measurements of the baby pythons may be of the same brood, they might have hatched one or two months before capture in case of first three and three to four months in case of the fourth one because it is comparitively longer than the other three.

Since the start of the park (19.12.1960 to 28.2.1974) 48 pythons of different sizes have been received or collected in the park and out of these, 20 have been collected from this park area. This shows how common this species is in Orissa in general and Chandaka forest area in particular.

Now-a-days pythons are rarer in some parts of India due to indiscriminate killing of this species for their skins. In the markets of Puri, Bhubaneswar and other cities there is a great demand of its skin for making shoes, ladies handbags, belts and purses.

Family VARANIDAE

Varanus salvator (Laurenti)
(Oriya name; Pani Godhi, Pani Goisap)

Distribution.—Range. India including Andaman and Nicobar islands, Sri Lanka, Burma, Indochina, Southern China, East Indian Archipelago and Northern Australia.

It occurs in West Bengal, Eastern Himalayas but not in the Peninsular India, therefore it is not likely to be found in Orissa. The specimens in the Zoo were received from a supplier of Calcutta.

Observations : Three water monitors were received in the Park on 2-7-1970 from an animal dealer of Calcutta. On the morning of 29-7-1971 one egg was found in their enclosure. The egg was elongated with blunt ends on both sides, soft shelled and white. It measured on that day 9.5 cm.×3.5 cm. and weighed 48 gms. (Pl. No. 1, 3). In this connection the observation of Deraiyagala (1958) on the reproduction of *Varanus bengalensis* (Daudin) is useful for further study on this species.

They were being fed with beef, without bones six days in a week with one day fasting. They also took eggs, small dead birds, rats, sometimes fishes and once one of them took even a young land monitor. While taking its feed, first it examines with its tongue, lifts the food by mouth and then gulps it. It takes eggs with or without breaking which pass entirely through the gullet.

Most of the time they are found submerged inside the water tank with the head remaining out of water. When annoyed at times it used to give lashing with its tail.

Parasites.—Duthiersia Fimbriata (*Dies*, 1850) *Mont Et. Crety*, 1891. It was recovered from stool of these monitors after medication (Acharjyo *et. al.*, 1970).

Remarks.—Regarding the size of the egg in the collection it is bigger than that of mentioned by Smith (1935) as 70×40 mm. and about the number of eggs laid at a time are 15 to 30. In the present case the lizard also might have laid more eggs, but as all the lizards were kept together and as natural condition was not provided, they might have swallowed the rest of eggs due to their egg taking habit. According to Smith (*loc. cit.*) usually the laying season is June in Thailand but in this case it was July.

Order SAURIA

Family CHAMAELEONIDAE

Chamaeleon zeylanicus (Laurenti)
(Oriya name; Bahurupi Endua or Pohola Endua)

Distribution.—Range. Peninsular India, South Gangetic Plains, Cutch and Sri Lanka.

In Orissa this species is known to occur in the districts of Puri, Cuttack, Ganjam, Keonjhar, Mayurbhanj, Dhenkanal and Sambalpur and may be in other districts also.

The collection of Zoological Survey of India contain three specimens from the upper Godavari Dist., Betul Dist. and Midnapore (Reg. No. 6840), West Bengal. Wide distribution of this species in Orissa justifies its occurrence in some parts of Midnapore Dist. adjoining Orissa. Theobald (1876) also recorded it from Midnapore.

Habits and Habitat.—They were found on plants and bushes in the rainy season or just after rains. In other times it is very rare in Nandankanan area though some are seen during summer months. Many were collected mostly from the ground on the roads and paths while they were passing from one side to the other. Others were taken from plants. The monthwise collection of eleven specimens of this species during 1972 and 1973 were: July 6, August 3 and September 2.

One was collected by Dr. N. K. Mohanty of Burla Medical College in April, 1973 at Burla (Sambalpur Dist.). Insects are plenty during rains and so the chameleon's activities are mostly observed during rains as they come out in search of their food.

Food.—Chameleons are voraceous eaters. They were fed chiefly, with insects such as grass hoppers, sand hoppers, flies and butterflies.

Observations.—Of the eleven specimens, three were females and eight males. A chameleon was collected from the park area on 3 .9.1972 and was kept in all indoor cage provided with water and small branches of a tree. In captivity most of them refuse to take food. Attempts were made to feed it with grass hoppers and sand hoppers holding the insect by forceps loosely a few inches in front of it. They were also seen taking cockroaches not more than 2 or 3 per day. These were readily taken. The chameleon remained motionless in the cage most of the time but used to be slightly active on showing the insects. Both its habits and movements were slow and deliberate and the movemenst of the eyes were independent of each other.

It was taking its food from 30-9-1972 to 21.10.1972 but refused to take food from 22.10.1972, laid 28 eggs on 25-10-1972 and found suddenly dead on 31.10.1972. After death three more white, hard shelled eggs were found in oviduct. The eggs deposited were oval, soft shelled, shrunken and some of these were studded with black dots and patches. The 31 eggs measured 1.6 cm. to 1.9 cm$\times$1 cm. to 1.2 cm. (pl. IV, 1).

Another female kept in captivity since 24.8.1973 took some insects at times from a forceps but found suddenly dead on 22.9.1973. On autopsy the whole of abdominal cavity was packed with 21 fully formed eggs pressing the lungs, and liver. These eggs were white oval, soft shelled, leathery to touch smooth and measured more or less the same as above.

A newly caught Indian chameleon when disturbed opens its mouth with a hissing sound and gives an attacking pose.

Two male chameleons were observed to fight in captivity. A male when gets ready for attacking an incoming another male, becomes flat vertically, thin and wide in its body. The body colour turns yellow with dark green stripes. In this posture, it nodds its head with open mouth and strikes at the fore-quarters of the other male. The other male after repeated strikes just withdraws. At this time the submissive male is only green in colour and in its usual natural size.

At other times fighting of two males were also observed. During fighting each gets thinner and wider in their bodies, turn yellow with green stripes and strike with open mouth at each other. No biting or injury due to fighting was ever observed. At the end, the defeated one withdraws. This may be a defence of territorial behaviour.

One chameleon in the collection of Dr. N. K. Mohanty, of Burla Medical College was seen moving about in the cage with open mouth. It then sat in the water pot submerging its lower portion, probably due to extreme heat during May, 1973 when the temperature was 48.3°C.

Sloughing of skin from the head and neck of one only was observed in captivity from 24.7.1973 to 27.7.1973. The process was slow and pieces of white skin like tissue paper peeled off.

Measurement of some adult specimens

Sl. No.	Sex	Length Snout to vent in cm.	Length tail in cm.	
1.	Male	15.1	18.2	Specimens are deposited in the Z. S. I. collection
2.	Male	16.3	17.2	
3.	Male	17.4	18.8	
4.	Female	16	17.9	
5.	Female	15.1	17.3	

Inspite of all attempts all these specimens died within two months in captivity. But one chameleon in the collection of Dr. N. K. Mohanty is still living for over 10 months on a daily diet of cockroaches and water is sprinkled daily several times over the leaves of a plant kept inside the cage for licking.

Parasites.—Nematodes were collected from intestine of one and peritoneal cavity of two chameleons. They belong to the species *Polydelphis hexametra* (Gedoclst, 1916).

Remarks—Our observations of number of eggs laid at a time agree with those of Trench (1972) but the size of this (13×7 mm.) is smaller. The size of our eggs conform to the eggs kept in the British Museum (19×12 mm.) Smith (1935). The black dots and patches on some of the eggs might be due to the development of mould.

The present specimens laid eggs after 26 days of capture, according to Trench (*loc. cit*) the gestation period is 36 days. In another female which was kept with males since 24.8.1973, fully formed eggs were collected from the abdominal cavity after death on 22.9.1973 on the 30th day of capture. However, no mating in captivity could be observed. A third female caught on 15.7.1973 and died on 11.9.1973, on autopsy revealed functional ovaries but no eggs. Therefore, the eggs of the lizards may have been fertilized in nature 10 days before its capture in the first case and a few days before its capture in the second case.

Hence, the breeding time of this lizard can be taken as August to October. In case of Trench's (*loc. cit*) specimen it was bit delayed due to mating delay.

The ability for changing colour to match their environment is well known in the chameleon (Schmidt and Inger, 1957). Though factors such as changes in light intensity or temperature are mostly responsible but change of emotion is also responsible for their colour change (Pl. VII).

The popular belief among the local people of the area is that the tail of these lizards has some curative properties for some diseases of infants, so tails of these lizards are cut on some auspicious days. In our collection 3 out of 11 were with mutilated tails. Such belief is wide spread in its range of distribution in India. It has been reported by Trench (*loc. cit*) that in Madhya Pradesh (Southern districts) people also believe that these lizards have some magical properties or charm. To save such a fascinating looking, entertaining and useful lizards the wrong ideas of the people should be dispelled and some protective measures might well be adopted.

Order TESTUDINES

Family TRIONYCHIDAE

Lissemys punctata granosa Schoepff
(Oriya name: Kaincha)

Distribution.—The Indian Peninsula, South of Ganges and Sri Lanka. In Orissa it occurs in Mahanadi and its tributaries and also in ponds, tanks and lakes. It is very common in Nandankanan lake.

Habits and Habitat.—This turtle is aquatic. It occurs in canals, marshes and ponds, though mainly lives in rivers. In some places it

wanders ashore at night in search of food. Sometimes it aestivates in the summer particularly in time of drought. This turtle is kept in temple tanks. In captivity they are kept in the same tank along with Gharials (*Gavialis gangeticus*) and muggers (*Crocodilus palustris*) for several years without injury or death. Tney sometimes emerge, but immediately return to the water at the approach of the keeper. At times they sit on the back of the Gharials.

Food.—This species is mainly carnivorous. It feeds largely upon fishes, molluscs, frogs and tadpoles whether or not its food is alive. They often take rejected and dead fishes found in the tank of gharials and muggers.

Observations.—(a) One of the turtle kept along with the crocodiles and gharials laid 4 round, grey coloured and hard shelled eggs on 30.11.1971 and two on 1.12.1971. The weight of the turtle was 2.300 kg. the diameter of eggs was from 3 cm. to 3.25 cm. and the weight were from 12.200 gm. to 13.800 gm.

(b) While digging pits adjacent to a dried up formerly water-logged area, 6 eggs were excavated out on 28.5.1973 from a depth nearly 23 cm. Some of the eggs were broken and the developing young died after an hour.

(c) From the same area two very small young were collected on 29.5.1973. They had probably hatched within the last one or two days. One weighed 8.700 gm. and the other 9.500 gm. The plaston length was 3.5 cm.

A small cartilaginous raised knob occurred just above the entoplaston. It was shed in the second week, post hatching of both juveniles.

The two hatchlings were kept in a tray and maintained on a diet of wheat flour and small cut pieces of greens upto 24.6.1973. One young which weighed 9.500 gm. on 29.5.1973 weighed 10.300 gm. on 25.6.1973. They were never seen taking any of the food though they remained always active.

(d) One young turtle with blackish shell colour measuring 5 cm. × 5 cm. and weighing 17.500 gm. was caught on 21.6.1973 when water was pumped from a muddy shallow tank at Nandankanan.

Remarks.—According to Smith (1931) this species lays 10 to 12 eggs at a time and keep them burried in the ground close to the water. The eggs measure 40 to 33 mm. in diameter. The measurements, of eggs given by Deraniyagala (1939) agree with ours but the weight (17 to 19.25 gms.) differs from our non-fertilised eggs (12.200 to 13.800) gms.

From the above mentioned observations it appears that the species lays eggs from November upto December and the young hatch in May or June. The incubation period seems to be about six months.

This turtle is eaten by people living near about Nandankanan, but the flesh of it is not sold in the local market. There is a belief among some people that this turtle will cure some chronic ailments. It is sometimes caught accidentally in fishing nets but no regular turtle fishing is practiced here. In West Bengal there is a good demand for the turtle meat and the meat of *Trionyx gangeticus* and *Lissemys punctatus punctatus* are often sold in local markets. Consignments of these species from other states also come to the market of West Bengal. Therefore there is a good possibility and scope for starting turtle fisheries in Orissa.

Summary

This paper notes some observations on biology of six species of reptiles occurring in and around Nandankanan Biological park. Earlier reports are also summarized.

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