

FRESHWATER TURTLES OF RIVER YAMUNA FROM BATESHWAR (FIROZABAD) TO DIBHOLI (ETAWAH), UTTAR PRADESH.

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Freshwater turtles play an important part in cleaning the waters of polluted rivers by consuming dead animals. Turtles are exploited for food by local people.

Studies on the freshwater turtles in India are very few while India is very rich in chelonian fauna. A few notable works are Singh (1985), Rao (1986), Rao & Singh (1987) and Mishra *et al.* (1996).

A survey was done in the river Yamuna from Bateshwar to Dibholi. Field surveys were conducted in the 25 km. river stretch in the following localities; Bateshwar, Kachaura Ghat, Etawah and Dibholi as shown in the area map. Weekly survey of each station was done from September 1997 to October 1998.

The methods used for turtle identification were those of Das (1995) and Das & Moll (1991).

Two types of turtles were observed during exploration:

(1) Softshell Turtles: (a) *Aspideretes gangeticus* (Cuvier, 1825) Indian Soft Shelled Turtle; (b) *Lissemys punctata* (Lacepede, 1788) Indian Flap Shell Turtle; (c) *Chitra indica* (Gray, 1831) Narrow-headed Soft Shelled Turtle

(2) Hardshell turtles: (a) *Kachuga tentoria* (Gray, 1834) Indian Tent Turtle; (b) *Kachuga dhongoka* (Gray, 1834) Three-striped Roofed Turtle; (c) *Kachuga kachuga* (Gray, 1831) Red-crowned Roofed Turtle

During survey on the freshwater turtles from Bateshwar to Dibholi, 6 species of turtles were identified. In Bateshwar, *C. indica*, *A. gangeticus*, *L. punctata* and *K. tentoria* were found. *K. kachuga* was found only in Etawah. *C. indica* was found only in Bateshwar. *K. tentoria* is the most abundant and encountered in all stations. *K. kachuga* and *C. indica* are endangered species. The turtles were mainly found where the depth of water is much and flow of water vary. It provides a good habitat to the turtle. Ninety nests of different species were recorded and predation was markedly high.

Rapacious turtling has continued over the years and very few attempts have been made to study the turtle from the conservation angle (Khan, 1982; Moll & Vijaya, 1986; Moll, 1986,87,91; Moll *et al.*, 1987; Das,1990; Ahsan *et al.*, 1989; Frazier, 1992; Vyas & Patel, 1990; Bhupathy & Vijayan, 1991). The area is very suitable for turtle breeding but it is dacoit infested and unsafe. Therefore, there is need to start effective steps to save them. Hunting, fishing and egg collection should be prohibited and conservation activities should be taken at the earliest.

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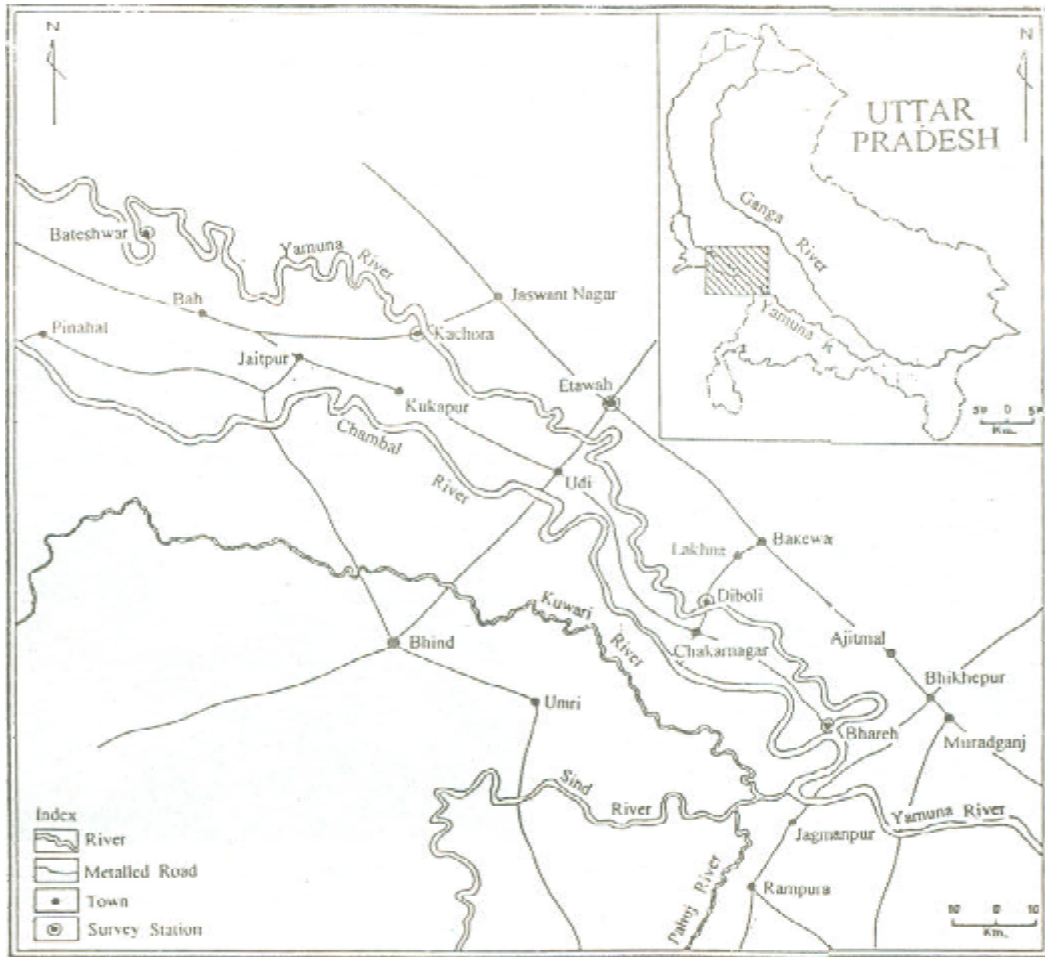


Figure 1. Pachnada Region. Yamuna River from Bateshwar to Bhareh



Figure 2. *Aspideretes gangeticus*, dorsal view (carapace).

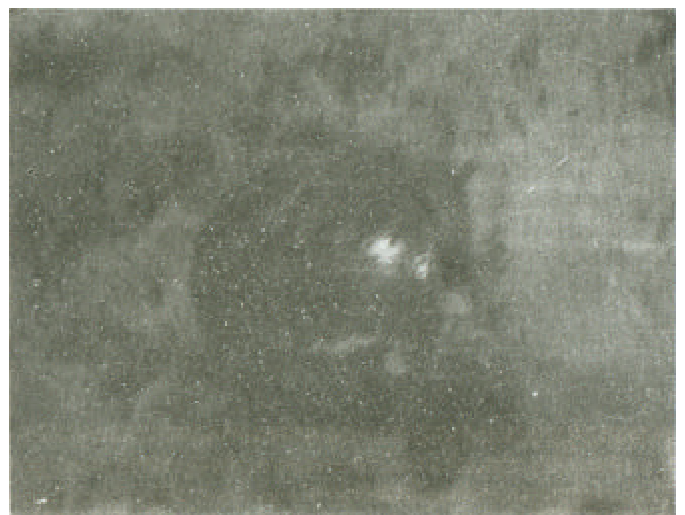


Figure 3. *Lissemys punctata*, dorsal view (carapace).

Table 1. Morphometry measurements of species are given in the table below:

Species	No. observed	Carapace length (in)	Plastron length (in)	Plastron width (in)	Weight (Kg.)
1. <i>Aspideretes gangeticus</i>	n=9	43.5	36.7	32.55	8.020
2. <i>Lissemys punctata</i>	n=4	17.5	14.4	15.95	0.660
3. <i>Chitra indica</i>	n=2	34.7	29	31	4.000
4. <i>Kachuga tentoria</i>	n=11	21.75	18	16.9	1.100
5. <i>Kachuga dhongoka</i>	n=10	21.3	18.13	15.76	1.43
6. <i>Kachuga kachuga</i>	n=2	46	40.1	21.2	13.750



Figure 4. *Chitra indica*, dorsal view, showing a pattern of wavy reticulations. The neck has longitudinal streaks



Figure 5. *Kachuga tentoria*, dorsal view, showing a pink ring along the peripheral marginal junction

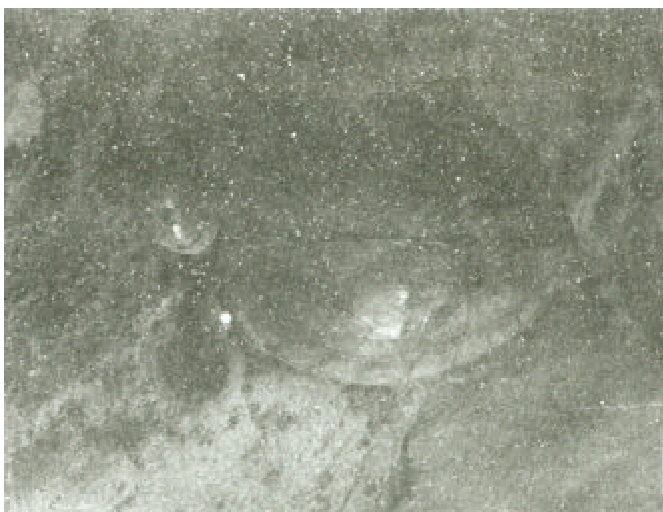


Figure 6. *Kachuga dhongoka*, dorsal view, showing black stripes above median keel extending from nuchal up to posterior margin of the carapace

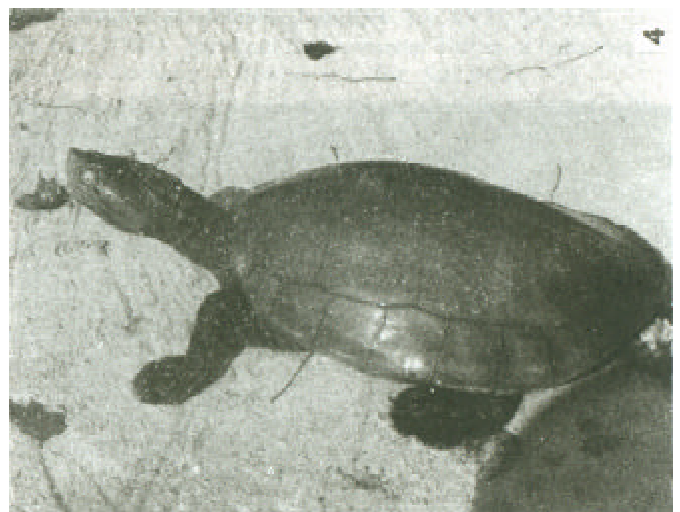


Figure 7. *Kachuga kachuga*, dorsal view, showing a red coloured patch between the eyes.