



© Abhijit Das

Indian black turtle
(*Melanochelys trijuga*)

IUCN Red List: Near Threatened; CITES: Not listed; IWPA, 1972: Schedule IV

This hardshell turtle is found in upper and middle stretches of the Ganga River. Carapace elongated, black, plastron blackish with dark yellow border. Crepuscular and nocturnal. Inhabits stagnant water bodies and rivers. Breeds during August to October. Nests are dug in sandy shore of rivers. Clutch size is 2-6, eggs hatch during November-December. Omnivorous; feeds on aquatic plants, invertebrates and carrion. Habitat loss due to conversion of the lentic water bodies into agricultural land such as rice fields and human settlements are major threats to this species.



© Abhijit Das

Indian tent turtle
(*Pangshura tentoria*)

IUCN Red List: Lower Risk/least concern; CITES: Appendix II; IWPA, 1972: Schedule I

This hardshell turtle is found in upper, middle and lower stretches of the Ganga River. Olive or brownish head, red post-ocular spot, brown carapace with amber or hazel stripes in the first three vertebrae and the plastron is yellow with black blotches. Inhabits fast flowing rivers and wetlands. Breeds during November and December. Nests are dug in sandy shore and mid-river islands. Clutch size is 4-9; eggs hatch during April-May. These are active swimmers and are mainly herbivorous in nature. Pet trade, hunting and harvesting of eggs, hydrology alteration and river-bed agriculture are major threats.



© Abhijit Das

Indian flapshell turtle
(*Lissemys punctata*)

IUCN Red List: Least concern; CITES: Appendix II; IWPA, 1972: Schedule I

This softshell turtle is found in upper, middle and lower stretches of the Ganga River, mainly in wetlands. Carapace moderately arched, a pair of large flaps can be closed over the hind limbs and a smaller flap over tail. Inhabit rivers and wetlands. Breeds two or three times in a year from July to November. Nests are dug in clayey shore of wetlands. Clutch size 4-15. Omnivorous; feeds on frogs, tadpoles, fish, crustaceans, mollusks, earthworms, insects, carrion and water plants. Exploitation for eggs and meat, illegal trade and habitat degradation are major threats to this species.



© Abhijit Das

Indian roofed turtle
(*Pangshura tecta*)

IUCN Red List: Least concern; CITES: Appendix I; IWPA, 1972: Schedule I

This hardshell turtle is found in upper, middle and lower stretches of the Ganga River. Carapace elevated, vertebral keel spiked on 3rd vertebra, yellow border along marginals. Inhabits rivers and lentic water bodies. Breeds during October to March. Nests are dug in sandy shore of rivers and wetlands. Clutch size is 3-14, eggs hatch during January-February. Omnivorous; feeds on fish, frogs, crustaceans, mollusks and water plants. Exploitation for eggs and meat, illegal trade and habitat degradation are major threats to this species.



© Niladri Dasgupta

Northern river terrapin

(*Batagura baska*)

IUCN Red List: Critically Endangered; CITES: Appendix I; IWPA, 1972: Schedule I

These terrapins are found only in the Sundarbans. Uprturned snout, carapace is smooth and grey or black, while plastron is yellow to whitish. It lives in coastal mangrove estuaries and creeks, but ventures far upstream during the breeding season. Omnivorous; feeds on mangrove fruits, waterside plants and small animals such as clams. Females dig nest in sandbars and banks far upstream from the normal estuarine habitat during the breeding season from December to March. Habitat degradation through hydrologic alteration, accidental drowning in fishing nets, poaching, illegal trade and sand mining are major threats to this species.

**GANGA AQUALIFE
CONSERVATION
MONITORING CENTRE**

Post Box #18, Chandrabani
Dehradun - 248001
Uttarakhand, India
t.: +91 135 2640114-15, 2646100
f.: +91 135 2640117

wii.gov.in/nmcg/national-mission-for-clean-ganga

XPRESSIONS: 9219552563
Doc. No. XPS16081710/9

VIBRANT GANGA 



turtles
of
ganga
river





Turtles have been inscribed in mythology, in the Bhagvad Purana, Agni Purana and Ramayan. Lord Vishnu incarnated as turtle 'Kurma Avtar', for the upkeep and to prevent destruction of the world, during the '*Samudra Manthan*'. Thus turtle is also known as symbol of perseverance.

Freshwater turtles are distinctive animals of riverine and wetland ecosystems and require specific habitats for their life history strategies and propagation. They have special physical and ecological adaptations for freshwater habitat. Alterations in their natural habitat make them vulnerable. The present rate of increase in anthropogenic activities and climatic shifts are major drivers of their habitat loss, habitat fragmentation and in turn population decline.

India is one of the world's hotspots for turtle diversity, representing 29 species of tortoises and freshwater turtles. The Ganges river system is home to 13 such species. These turtles play a significant role in the river by scavenging dead organic material and diseased fish, controlling fish population as predators and controlling aquatic plants and weeds. They are also indicators of healthy aquatic ecosystems. These species are under tremendous pressure due to habitat fragmentation and loss through dams and barrages, pollution, illegal poaching, accidental drowning through fishing nets and threat to their nesting habitat.

National Mission for Clean Ganga - Wildlife Institute of India's project titled "Biodiversity Conservation and Ganga Rejuvenation" is a science-based species restoration programme. Conservation of these turtle species is a part of this science-based Ganga rejuvenation programme.

The conservation status of the species are referred here as per the International Union for Conservation of Nature and Natural Resources (IUCN) Red List, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendices and Indian Wild Life (Protection) Act (IWPA), 1972 Schedules.



© Indraneil Das

Red-crowned roofed turtle
(*Batagur kachuga*)

IUCN Red List: Critically Endangered; CITES: Appendix II; IWPA, 1972: Schedule I

This hardshell turtle is distributed in upper, middle and lower stretches of the Ganga River. The limbs have transversely enlarged, band-like scales, nape has red longitudinal lines. Males reach only half the length of females. Exclusively freshwater, inhabiting deep flowing rivers with terrestrial sandy nesting sites. Herbivorous, feeds mainly on aquatic vegetation. Breeds during March and April. Nests are located in sandy beaches and islands. Clutch size 11-30, eggs hatch in June. Habitat degradation through hydrologic alteration, accidental drowning in fishing nets, poaching, illegal trade and sand mining are major threats to this species.



© Rajeev Basumatary

Narrow-headed soft-shell turtle
(*Chitra indica*)

IUCN Red List: Endangered; CITES: Appendix II; IWPA, 1972: Schedule IV

This softshell turtle can be easily identified from the "V" shaped marking from nape of the neck to the anterior part of the carapace. Distributed in upper, middle and lower stretches of the Ganga River. Exclusively freshwater, rarely basks. Inhabits fast flowing rivers with terrestrial sandy nesting sites. Carnivore, ambush hunter, stays concealed below the sand-vegetation, with only the tip of the snout exposed. Feeds on fish, frog, crustaceans, and mollusks. It breeds during June to August in central India. Nests are located in islands and sandy river banks. Clutch size 65-193, eggs hatch during September-October. Habitat degradation through hydrologic alteration, accidental drowning in fishing nets, poaching, illegal trade and sand mining are major threats to this species.



© Abhijit Das

Three-striped roofed Turtle
(*Batagur dhongoka*)

IUCN Red List: Endangered; CITES: Appendix II; IWPA, 1972: Schedule I

This hardshell species is found in upper, middle and lower stretches of the Ganga River. Carapace oval and elevated. Dorsally brownish-grey with three dark brown stripes. A yellow stripe on head and neck from tip of snout, over eyes. Inhabits large rivers with terrestrial nesting sandy banks. Breeds during March and April. Nests are located on islands and sandy river banks. Clutch size 26, eggs hatch during June. Males are omnivorous while the diet of females is unknown. Habitat degradation through hydrologic alterations, accidental drowning in fishing nets, poaching, illegal trade and sand mining are major threats to this species.



© Niladri Dasgupta

Black spotted turtle
(*Geoclemys hamiltonii*)

IUCN Red List: Vulnerable; CITES: Appendix I; IWPA, 1972: Schedule I

These hardshell turtles are found in upper, middle and lower stretches of the Ganga River. Body black with yellowish streaks or spots and wedge-shaped marks. Inhabits freshwater wetlands and rivers. Breeds during April. Nests are located in marshy area among vegetation. Clutch size 18-30, eggs hatch during May-June. Carnivorous and feed on snails and insect larvae. Pet trade, hunting and harvesting of eggs, hydrology alteration and river-bed agriculture are major threats to this species.



© Abhijit Das

Crowned river turtle
(*Hardella thurjii*)

IUCN Red List: Vulnerable; CITES: Appendix II; IWPA, 1972: Schedule IV

This hardshell turtle is found in upper, middle and lower stretches of the Ganga River. Body black with four yellowish orange stripes on either side. Inhabits rivers, wetlands and estuaries. Exclusively aquatic, feeds on grasses and marsh plants. Over-exploitation for meat, habitat loss due to conversion of the lentic water bodies into agricultural land such as rice fields and for human settlements are major threats to this species.



© Abhijit Das

Indian softshell turtle
(*Nilssonina gangetica*)

IUCN Red List: Vulnerable; CITES: Appendix I; IWPA, 1972: Schedule I

This softshell species is found in middle and lower stretches of the Ganga River. Body is flattened and snout tube-like. Inhabits deep rivers, streams, and large canals, lakes and ponds with mud and sand bottoms. Breeds during August and November. Nests are located in islands and clayey river banks. Clutch size is 8-47, eggs hatch around July. Omnivorous, voracious feeder, feed on mollusks, insects, fish, amphibians, waterfowl and carrion and aquatic plants. Habitat degradation through hydrologic alteration, accidental drowning in fishing nets, poaching, illegal trade and sand mining are major threats to this species.



© Abhijit Das

Indian peacock softshell turtle
(*Nilssonina hurum*)

IUCN Red List: Vulnerable; CITES: Appendix I; IWPA, 1972: Schedule I

This softshell species is found in upper, middle and lower stretches of the Ganga River. Head large, dark olive green to nearly black oval carapace and downturned snout. Inhabit rivers, streams, lakes and ponds with mud or sand bottoms. Breeds during August to November. Nests are located in islands and silty river banks. Clutch size 20-30, eggs hatch during June-July. Omnivorous, feeds on fish, frogs, carrion, snails, earthworms, crustaceans and vegetation. Habitat degradation through hydrologic alteration, siltation, accidental drowning in fishing nets, poaching, illegal trade and sand mining are major threats to this species.



© Abhijit Das

Brown roofed turtle
(*Pangshura smithii*)

IUCN Red List: Near Threatened; CITES: Appendix II; IWPA, 1972: Schedule IV

This hard shell turtle is found in the upper and middle stretches of the Ganga River. Carapace elongated, depressed and brown or yellow in colour, yellow border along its edge. Inhabits medium and large rivers with vegetation. Breeds during October to late November. Nests are dug in sandy shore of rivers. Clutch size is 2-9, eggs hatch during January-February. Feeds on aquatic vegetation and fishes. Habitat loss is one of the major threats to this species.