

TO FRESHWATER TURTLES AND TORTOISES OF INDIA

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TRAFFIC — INDIA—



World Wide Fund for Nature - India





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The World Wide Fund for Nature India (WWF-India) has been working to promote harmony between humankind and nature for almost three decades. Today, it is recognized as a premier conservation NGO in the country dealing with conservation and development issues.

At a time when the Web of Life has come under increasing threats, WWF-India's attempts have been to find and implement solutions so that human beings can live in harmony with nature, and leave a world rich in natural resources and natural wonders for future generations.

Formerly known as the World Wildlife Fund, WWF-India was established as a Charitable Trust in 1969. With its network of State/Divisional and Field Offices spread across the country to implement its programmes, WWF-India is the largest and one of the most experienced conservation organisations in the country. WWF-India's secretariat functions from New Delhi. The organisation is part of the WWF family with 27 independent National Organisations. The coordinating body, WWF International, is located at Gland in Switzerland.

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#### **FOREWORD**

Like bird watching, observing turtles in the wild also requires aptitude and skill. Experience makes a turtle lover more proficient at spotting the animal in its habitat. The experienced watcher is able to identify turtles in their retreats, basking on a log or surfacing in a river or a canal.

There is increasing concern today that inspite of legal protection given to many a turtle species, they are being exploited for food and pet trade. In addition to conservation concerns, the pet turtle trade raises health and ethical issues too. Pet turtles can carry infectious bacteria (commonly *Salmonella*) and are often stored and transported under questionable conditions.

To help gain experience in identification as a first step to conservation effort, WWF-India is publishing this guide to "Freshwater Turtles and Tortoises of India". The aim is to provide basic information to all, young and old, researchers as well as others interested in the subject.

The guide carries information on the morphology, distribution, legal and trade status of the species and is planned as a handy reference in the field.

It is hoped that it will be found useful and will help towards a better understanding for the conservation of all freshwater turtles and tortoises in the country.

> Samar Singh Secretary General WWF-India

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#### ARE YOU AWARE?

Like other wildlife, Reptiles and Amphibians too have suffered from various factors like habitat destruction, pollution and sometimes by commercial exploitation for food, pets etc. To feed and satisfy the pet or food market and to make easy money the collectors and traders take away thousands of animals, both native and of foreign orgin. Many of these are purchased as unusual novelty items by people with little or no knowledge of requirements like preferred food or living conditions for their wellbeing. This often results in the death of many captured specimens within a short time. Sometimes, ignorant possessors release them into alien habitats where they cannot survive.

- Please do not commit such cruelties with animals that cannot express displeasure or pain.
- Be kind to the species and its habitat.
- Find out more about animal species with whom you cohabit the earth.
- Do not keep the banned species as pets.
- Do not trade in the banned species and discourage others from doing so.
- For more information interact or check with your nearest forest or wildlife department office.
- If you decide to release a specimen, return it as close as possible to the original capture site. (If it is native to your area.)
- If it is not a native species, donate it to a wildlife centre or a Zoo.

Remember, a responsible human being and a good conservationist is one who leaves an animal's habitat the way he/she found it, protects it from those who try to damage it or harm their inhabitants and let its fellow creatures live in their natural habitat peacefully.

Author

#### HOW THIS GUIDE WORKS

Many people do not know the difference between a turtle and a tortoise. This group of fascinating animals is often ignored by many wildlife enthusiasts with eyes and ears only for birds and mammals. This is an effort to make turtle identification easy even for a layperson and generate interest for turtles among people from all walks of life.

The 'Tortoises' are land dwelling animals whereas 'Turtles' are aquatic in nature. While 'Tortoises' spend most of their lives on land coming to water for some specific activities, 'Turtles' spend their major part of life in water and for certain activities come to the land.

This book is arranged according to the three main categories of freshwater chelonians i.e Tortoises, hardshell turtles and softshell turtles found in India.

When you spot a turtle, first look for the following characteristics:



#### Hardshell turtles:

Limbs and forehead scaled. 3-clawed Digits (toes) slightly to extensively webbed. Hind-limbs not elephantine. Carapace covered with scutes which makes shell hard-rock-like /wooden to the feel. Can be aquatic, semi-terrestrial or terrestrial.



#### Softshell turtles:

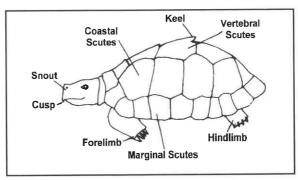
Limbs and forehead not scaled. Three clawed fore and hind limbs (webbed). Lack scutes on the shell and the shell (carapace) is covered with skin. Seldom found far from water.



#### Tortoises:

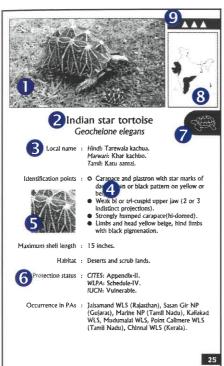
Elephantine hind-limbs. Strong -nailed limbs without webs, with two or less phalanges in the toes. Rock-like shell. Heavily scaled limbs and forehead.

#### OUTLINE OF A TURTLE / TORTOISE



#### **ANNOTATIONS**

The entries that follow give information, in words and pictures. This example shows how a typical entry is organised.



- Picture of the species.
- Common and the Scientific name of the species.
- Vernacular names.
- 4 Main text describing identification features of the species, the feature marked with star is the main identification point as shown in the inset picture.
- Inset picture of the species showing the main identification features.
- 6 Protection status of the species. (refer to Box-2 for details)
- Thumbnail, for easy identification of hardshell turtle, easy softshell turtle and tortoise.
- 8 Map showing distribution of the species.
- Indicators of utilisation and exploitation levels. (refer to Box-1 for details)

#### Box - 1

Utilisation:	Frequency of symbol indicates the level of exploitation:	
Food trade (F)	Number of occurences	Level of exploitation
Pet trade (P)	*	Local or limited
Both (F&P)	**	Medium .
Not in trade	***	Heavy

#### Box - 2

#### Protection status:

In addition to the CITES and WLPA, the status of species arrived at CAMP/BCPP workshops has been included. BCPP, administered by WWF-India since 1996, conducted CAMP workshops in collaboration with Zoo Outreach Organisation to assess conservation status of turtle species in India following the IUCN Red list categories, 1994.

#### **GLOSSARY**

Bridge : Part of shell connecting carapace to plastron
Bi-cuspid : Possessing two cusps (pointed projections)

BCPP : Biodiversity Conservation Prioitisation Project

Carapace : The dorsal (upper) shell of a turtle

Coarsely pitted : Rough holes

Cusp : Projection from the edge of the jaw CITES : Convention on International Trade in

Endangered Species of wild fauna and flora

CAMP : Conservation Assessment and Management

Plan

Depressed : Flattened from top to bottom

Digit : A finger or a toe

Elevated : Raised Fore limbs : Front legs

Freshwater : Water which is not salty e.g pond or river

water

Hind limbs : Back legs Hinge : Joint

Iris : Coloured part of the eye around the pupil

Keel : A narrow prominent ridge

Low : Not domed

Notch : Deep cleft on the shell

NP : National Park
PA : Protected Area

Phalanges : Bones in the fingers or toes

Plastron : The ventral (lower) shell of a turtle

RF : Reserve Forest

Scute : A horny epidermal shield
Serrated : Possessing a saw-toothed edge

Snout : The elongated nose

Spur : Needle-like TR : Tiger Reserve

WLPA: Wildlife (Protection) Act, 1972

WLS : Wildlife Sanctuary







## Asian leaf turtle Cyclemys dentata



Local name: Not recorded.

Identification points: • Colour usually brown with narrow black radiating lines on each scute of carapace and plastron.



- Carapace flattened with a slight (unprominent) keel.
- Upper jaw hooked, bi-cuspid.
- Digits almost web-less.

Maximum shell length: 10 inches.

Habitat: Hill forests.

Protection status: CITES: Not listed.

WLPA: Not listed.

IUCN: Low risk, near threatened.

Occurrence in PAs : Chessa RF (Arunachal Pradesh),

Sibsagar WLS, Nameri WLS, Mupa-Lanteng

RF (Assam).









### Assam roofed turtle Kachuga sylhetensis

Local name: Bengali: Kath kathua, Sylhet: Kori kathua.

Identification points: • Strikingly high carapace with a prominent vertebral spiked keel.

 Posterior marginals strongly serrated. Weakly hooked upper jaw and well

webbed digits.

 Colour olive-brown above with pale keel. vellow below with dark blotches.

Wavy yellow stripe across back of head and lower jaw.

Light streaks on neck.

Maximum shell length: upto 8 inches.

Habitat: Ponds and hill streams.

Protection status: CITES: Not listed.

WLPA: Schedule-I.

IUCN: Critically endangered.

Occurrence in PAs: Manas TR, Nameri WLS,

Dibru-Saikhowa WLS (Assam).





# Brown roofed turtle Kachuga smithii



Sub species: Kachuga smithii smithii.

Kachuga smithii pallipedes.

Local name: Bengali: Vaittal katha.

Hindi: Chapant, Pachera.

Identification points: • Carapace depressed and slightly keeled.

• Grey/buff head, darker on top, with a brownish spot behind eye.

Snout pointed and jaws serrated. Digits well webbed.

Often found in aggregations.

 Colour olive brown above with a black or brown keel and black bloches.

 Undersurface black, each scute with a narrow white margin.

Maximum shell length: 9 inches.

Habitat: Rivers (Ganges, Indus and major tributaries).

Protection status: CITES: Not listed.

WLPA: Not listed.

IUCN: Low risk, least concern.

Occurrence in PAs: Manas TR, Kaziranga NP, Orang WLS

(Assam), Katerniaghat WLS (Uttar Pradesh).







## Cochin forest cane turtle Geoemyda sylvatica

Local name : Kannada: Battadh.

Tamil: Vengal aamai.

Identification points: • Depressed carapace with three keels.

Hooked upper jaw.

Colour brown above and yellow below.

• Two brown blotches on each bridge. A red spot on top of snout. Large eyes with

scarlet iris.

Limbs and tail black or brown.

Soft parts brighter in males.

Maximum shell length: upto 5.1 inches.

Habitat: Evergreen forest undergrowth and lower

altitude bamboo groves.

Protection status: CITES: Not listed.

WLPA: Schedule-I. IUCN: Vulnerable.

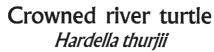
Occurrence in PAs: Peechi-Vazhani WLS, Neyyal WLS, Idukki

WLS, Peppara WLS, Parambikulam WLS, Kothaiyal RF (Kerala), Indira Gandhi WLS

(Tamil Nadu).









Sub species: Hardella thurjii thurjii.

Local name: Bengali: Kali / kalo katha. Hindi: Kala dhond.

Identification points: • Four yellowish-orange stripes on each side of the head.

Carapace dark brown with a grey -black vertebral keel.

Carapace fairly flat with interrupted

vertebral keel. Plastron yellow, each scute with a large

blackish blotch.

 A yellowish-orange band often present on the pleuro-marginal juncture.

Maximum shell length: 24 inches.

Habitat: Sluggish or still water bodies, inhabits pools, ponds, canals, lakes and slow-moving rivers.

Protection status: CITES: Not listed.

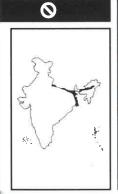
WLPA: Not listed. **IUCN:** Vulnerable.

Occurrence in PAs : Kaziranga NP (Assam), Chambal WLS, Kanha

NP (Madhya Pradesh), Dudhwa TR,

Katerniaghat WLS (Uttar Pradesh), Keoladeo

NP (Rajasthan), Harike Lake (Punjab).







# Indian eyed turtle Morenia petersi

Local name: Bengali: Haldey katha.

Identification points: • Carapace domed.

• Pointed snout and head dark olive with three yellow streaks.

 First four vertebral scutes with a U-shaped mark and green stripes.

 Pleurals have looped lines and pale green circles.

 Undersurface yellow/orange, with dark blotches.

Well webbed digits.

Maximum shell length: upto 7.9 inches.

Habitat: Mainly Rivers.

Protection status: CITES: Not listed.

WLPA: Not listed.

IUCN: Low risk near threatened.

Occurrence in PAs: Dudhwa TR (Uttar Pradesh).





## Indian roofed turtle Kachuga tecta



Local name: Bengali: Kori Katha.

Gujrati: Rangin Kachbo.

Hindi: Pachera, Pachauri, Tilhara, Chandan

Kachua.

Identification points: • Neck distinctly striped.Red or orange

crescent marking near eye. Carapace elevated with flat sides and a

strong median keel(spiked).

The second vertebra generally longer than

the third.

Digits well webbed.

Colour olive brown above with red keel.

Below, pinkish-yellow, each scute having 2-3 black blotches.

• Forelimbs spotted with yellow.

Maximum shell length: 9 inches.

Habitat: Smaller rivers and stagnant water bodies

sometimes in larger rivers.

Protection status : CITES: Appendix-I.

WLPA: Schedule-I.

IUCN: Low risk, near threatened.

Occurrence in PAs: Kaziranga NP, Orang WLS (Assam), Dudhwa

TR, Corbett TR (Uttar Pradesh), Sunderban

TR (West Bengal). Keoladeo NP

(Rajasthan).







## Indian tent turtle Kachuga tentoria

Sub species: K.t.tentoria, K.t.circumdata, K.t. flaviventer.

Local name: Bengali: Majhari katha.

Gujrati: Rangin. Hindi: Pachera.

Identification points: • Carapace elevated with flat sides and a strong median keel (spiked).

> • Differs from *K. tecta* by having third vertebra generally longer than the second and the absence of crescent marking near eye.

Digits well webbed.

Colour olive-brown above, with a red keel.

Pinkish below, with only one black blotch on each scute.

• Neck stripes few and indistinct spots on limbs faint or absent.

Maximum shell length: 11.8 inches.

Habitat: Generally rivers (Ganges, Godavari, Krishna

and Mahanadi) and ponds.

Protection status: CITES: Not listed.

WLPA: Not listed. IUCN: Vulnerable.

*K.t.tentoria:* low risk, near threatened.

Occurrence in PAs: Katerniaghat WLS, Dudhwa TR (Uttar

Pradesh).







### Keeled box turtle Pyxidea mouhotii



Local name: Not recorded.

- Identification points: Flat carapace with three keels.
  - Strongly serrated marginals.
  - Upper jaw hooked.
  - Unwebbed digits or half webbed.
  - Colour brown above and yellowish brown below.

Maximum shell length: upto 7 inches.

Habitat: Hill forests.

Protection status: CITES: Not listed.

WLPA: Not listed.

IUCN: Low risk, near threatened.

Occurrence in PAs: Namdhapa TR, Mehoo WLS (Arunachal

Pradesh), Mupa Lanteng RF (Assam).







#### Malayan box turtle Cuora amboinensis

Sub species: Cuora amboinensis camaroma.

Local name: Bengali: Dib kochop, Chapa katha.

Hindi: Pahari Kachua.

Identification points: • Head dark brown or green above, with yellow stripes.

Convex carapace having a median keel.

Plastron having well developed hinge.

Digits well webbed.

 Colour dark olive, brown or black above and pale below, with black spots.

Maximum shell length: 8 inches.

Habitat: Marshes and flooded paddy-fields.

Protection status: CITES: Not listed.

WLPA: Not listed.

IUCN: Low risk, near threatened.

Occurrence in PAs: Galathea NP (Great Nicobar Island), D'Ering

WLS (Arunachal Pradesh), Kaziranga NP,

Manas TR, Orang WLS (Assam).





### Peninsular black turtle Melanochelys trijuga



Sub-species: M.t.trijuga (Peninsular black turtle).

*M.t.coronata* (Cochin black turtle).

M.t.indopeninsularis (Bangladesh black turtle).

M.t. thermalis (Srilanka black turtle).

Local name: Guirati: Kala rang no kachbo.

Hindi: Talao kachua.

Tamil: Karrupu/tanni/kal aamai.

Identification points: • Moderately depressed carapace with 3 keels.

Well-webbed digits.

 Colour dark brown to almost black, undersurface dark with yellow margin.

Head grey or olive with yellow or pink reticulation on the sides.

Enlarged scales on forelimb and hindlimb.

Maximum shell length: 9 inches.

Habitat: Ponds, rivers and also land.

Protection status: CITES: Not listed.

WLPA: Not listed.

IUCN: Peninsular black turtle: Low risk least concern; Cochin black turtle: Vulnerable; Bangladesh black turtle: Low risk, near threatened; Srilanka black turtle: Endangered.

Occurrence in PAs: Manas TR (Assam), Nongkhyllem WLS

(Meghalaya), Dudhwa TR, Corbett TR (Uttar

Pradesh), Mudumalai WLS,

Point Calimere WLS (Tamil Nadu).







## Red crowned roofed turtle Kachuga kachuga

Local name: Bengali: Adi kori katha. Hindi: Sal, Sadhua.

Identification points: • Carapace depressed and median keel prominent.

- Snout upturned and upper jaw slightly bicuspid in the adult.
- Digits well webbed.
- Colour olive or brownish above, yellowish below.
- Males in breeding season have seven red stripes along the neck, the head becomes red on top, and bluish on sides.
- A pair of yellow or red oblong spots present on the throat.
- Females and non-breeding males dark olive/brownish throughout.

Maximum shell length: 19.8 inches.

Habitat: Rivers (Ganges).

Protection status: CITES: Not listed.

WLPA: Schedule-I. IUCN: Vulnerable.

Occurrence in PAs: Chambal NP (Madhya Pradesh).





# River terrapin Batagur baska



Local name : Bengali: Pora Katha, Boro Ketho, Sona

Katha.

Identification points: • Pointed and up-turned (tilted) nose tip.

Jaws sawed and carapace flat.

Four clawed limbs with well webbed digits.

Colour brown or grey.

Maximum shell length: 24 inches.

Habitat : Estuaries, large rivers, freshwater lakes and

canals.

Protection status: CITES: Appendix-I.

WLPA: Schedule-I.

IUCN: Critically endangered.

Occurrence in PAs : Sunderban TR (West Bengal),

Bhitarkanika WLS (Orissa).







#### Spotted pond turtle Geoclemys hamiltonii

Local name: Bengali: Kalo/Bhut katha.

Identification points: • Head black with yellow spots and numerous white spots present on a grey neck and limbs.

- O Colour black with dull yellow blotches and wedge-shaped marks.
- Carapace elongated with 3 keels.
- Head large with a short snout.
- Digits well webbed.
- Pale yellow below with dark markings.

Maximum shell length: 14 inches.

Habitat: Ponds, marshes and rivers. (Brahmaputra,

Ganges and Indus)

Protection status : CITES: Appendix-I.

WLPA: Schedule-I. IUCN: Vulnerable.

Occurrence in PAs: Kaziranga NP, Orang WLS (Assam), Harike

Lake (Punjab), Keoladeo NP (Rajasthan).





## Three striped roofed turtle Kachuga dhongoka



Local name : Bengali: Sada Katha. Hindi: Dhor, Barsi.

Identification points: • Colour olive or brown above with three black stripes (One medial and two lateral stripes).



A pale yellow or white stripe on each side of the brownish head.

 Carapace depressed, but median keel prominent.

Snout pointed and digits well webbed.

Below yellowish where in the young, a large reddish-brown patch on each scute.

16 inches. Maximum shell length:

Habitat: Rivers (Brahmaputra and Ganges).

Protection status: CITES: Not listed.

WLPA: Not listed. IUCN: Vulnerable.

Occurrence in PAs: Dudhwa TR, Corbett TR (Uttar Pradesh),

Chambal NP (Madhya Pradesh), Keoladeo NP

(Rajasthan).







## Tricarinate hill turtle Melanochelys tricarinata

Local name : Bengali: Shila kochop.

Identification points: 

Elongated and distinctly arched carapace with 3 keels.



O Colour black or brownish above with yellow keels.

 Dark head, sometimes with a broad red stripe on each side.

 Digits lack webbing almost entirely or halfwebbed.

Undersurface yellowish brown.

Maximum shell length: upto 6 inches.

Habitat: Hillsides of deciduous forests.

Protection status: CITES: Appendix-I.

WLPA: Schedule-IV.

IUCN: Low risk, least concern.

Occurrence in PAs : Kaziranga NP, Manas TR, Mupa-Lanteng RF,

Orang WLS (Assam), Dudhwa TR, Corbett

TR (Uttar Pradesh).





## Asian giant softshell turtle Pelochelys cantorii (bibroni)



Local name : Bengali: Jata Kachim.



 Colour olive/brown, spotted or streaked with lighter/darker shades.

 Head, outer surface of limbs and neck olive, plastron cream.

Jaws white with darker markings.

Snout short, flat and rounded.

Maximum shell length: 40 inches (or sometimes more).

Habitat: Estuaries (East and West coast of India)

Hooghly (Calcutta), Chaur, Mahadevi

(Orissa), Kerala, Palk Bay- Mandapam (Tamil

Nadu).

Protection status: CITES: Not listed.

WLPA: Schedule-I.

IUCN: Low risk, near threatened.

Occurrence in PAs: Sundarban TR (West Bengal), Marine NP

(Tamil Nadu).







## Indian flapshell turtle Lissemys punctata

Sub-species: L.punctata punctata.

L.punctata andersonii.

Local name: Bengali: Til Kachim.

Hindi: Sundri, Matia. Tamil: Pal aamai.

Identification points: • Carapace depressed and oval. Flaps of plastron present.

> • Colour olive brown above "with large yellow spots in andersonii'

Undersurface pale coloured.

 Head greenish with several yellow spots in andersonii.

Maximum shell length: 14 inches.

Habitat: Rivers (Ganges and Indus) and ponds

(Stagnant waterbodies).

Protection status: CITES: Appendix-II.

WLPA: Schedule-I.

IUCN: Lower risk, near threatened.

Occurrence in PAs: Kaziranga NP (Assam), Chambal NP

(Madhya Pradesh), Chilika Lake,

Gahirmatha WLS, Nandan Kanan Zoological Park (Orissa), Hazaribagh WLS (Bihar). Peechi-Vazhani WLS (Kerala), Harike Lake

(Punjab), Keoladeo NP (Rajasthan),

Dudhwa TR (Uttar Pradesh).









## Indian peacock softshell turtle Aspideretus hurum



Local name : Bengali: Dhum Kachim.

Hindi: Charpaiya, Kathawah, Kachua.

Identification points: • Carapace depressed, oval and coarsely pitted.

> Head large with longish snout strongly downturned.

 Colour olive green above, with black reticulations and narrow yellow spots, most prominent behind the eyes.

• Eye like markings on the shell.

 Head and shell markings tend to become indistinct with age, may even disappear.

Maximum shell length: 23.5 inches.

Habitat: Large Rivers.

Protection status : CITES: Appendix-I.

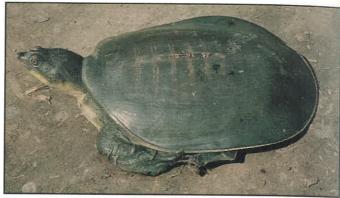
WLPA: Schedule-I.

IUCN: Low risk, near threatened.

Occurrence in PAs: Mupa-Lanteng RF (Assam), Bherihari WLS

(Bihar), Keoladeo NP (Rajasthan).







# Indian softshell turtle Aspideretus gangeticus

Local name : Bengali: Ganga Kachim.

Hindi: Patal, Kathawah, Kachua.

Identification points: • Carapace depressed and oval.

 A slightly downturned snout on a large head.

 Colour dull olive/greenish with black reticulations/yellow spots.

Head green above with black, oblique stripes on the forehead and sides, which may be broken and in old specimens, entirely lost.

 4-6 eyelike markings on the back of young.

Maximum shell length: 28 inches.

Habitat: Rivers (Ganges, Indus and Mahanadi) and

large reservoirs.

Protection status: CITES: Appendix-I.

*WLPA:* Schedule-I. *IUCN:* Vulnerable.

Occurrence in PAs : Keoladeo NP (Rajasthan), Harike Lake

(Punjab), Dudhwa TR, (Uttar Pradesh),

Chambal NP (Madhya Pradesh).





## Leith's softshell turtle Aspideretus leithii



Local name: Kannada: Pale poo.

Tamil: Parisal aamai. Telugu: Nadi tabelu.

identification points: • Carapace flattened and oval. Warts present on the interior side of carapace.

 Colour Grey or greyish-olive with yellow markings (vermiculations), more prominent in young ones.

Plastron is cream coloured.

 Head greenish with a black streak in young ones.

Maximum shell lenght: 25 inches.

Habitat: Rivers and reservoirs (Peninsular India).

Protection status: CITES: Not listed.

WLPA: Schedule-IV. IUCN: Vulnerable.

Occurrence in PAs : Sharavati WLS (Karnataka), Nagarjunsagar NP

(Andhra Pradesh), Mudumalai WLS (Tamil

Nadu).







#### Narrow headed softshell turtle Chitra indica

Local name : *Bengali & Hindi:* Chitra/Sitra. *Hindi:* Seontar.

Identification points: • Head small and elongated, snout rounded, neck indistinct from head.

Eyes situated close to nostrils.

Carapace depressed and oval.

• Colour dull olive or grey above with a complicated pattern of wavy reticulations.

• A V-shaped mark is present on the neck.

 Young ones have 4 indistinct eyelike markings and reticulations.

Undersurface is white.

Maximum shell length: 72 inches.

Habitat: Rivers (Ganges, Godavari, Indus and

Mahanadi).

Protection status: CITES: Not listed.

WLPA: Schedule-IV.

IUCN: Low risk, near threatened.

Occurrence in PAs: Harike Lake (Punjab), Chambal NP (Madhya

Pradesh).





#### Asian Brown tortoise Manouria emys



Local name : Bengali: Pahari kachop.

Identification points: • Carapace convex but flattened centrally.

Serrated marginals.

Tail ends in a claw like spur.

 Upper jaw slightly hooked, plastron deeply notched at the posterior end.

Colour dark brown or blackish.

Head and limbs blackish.

Maximum shell length: upto 19 inches.

Habitat: Tropical moist forest.

Protection status : CITES: Appendix-II.

WLPA: Schedule-IV. IUCN: Vulnerable.

Occurrence in PAs: Mupa-Lanteng RF (Assam),

Nongkhyllem RF (Meghalaya).







## Elongated tortoise or Sal forest tortoise

Indotestudo elongata

Local name : Bengali: Pahari Haldey kochop.

Hindi: Suryamukhi.

Identification points: • Arched flat topped and elongated carapace.

Tail ends in claw like spur.

Tri-cuspid upper jaw.

 Carapace brownish, greenish or bright yellow and plastron yellow.

• Carapace and plastron with black blotches.

 Pale head except during breeding season when area around nostrils and eyes become bright pink in colour.



Maximum shell length: 13 inches.

Habitat: Restricted to Sal forests.

Protection status: CITES: Appendix-II.

WLPA: Schedule-IV.

IUCN: Low risk, near threatened nationally,

Data deficient globally.

Occurrence in PAs : Corbett TR, Rajaji NP (Uttar Pradesh),

Simlipal TR (Orissa), Saranda RF (Bihar).









#### Indian star tortoise Geochelone elegans

Local name : Hindi: Tarewala kachua.

Marwari: Khar kachbo. Tamil: Katu aamai.

Identification points: • Carapace and plastron with star marks of dark brown or black pattern on yellow or beige.

 Weak bi or tri-cuspid upper jaw (2 or 3 indistinct projections).

Strongly humped carapace(hi-domed).

 Limbs and head yellow beige, hind limbs with black pigmenation.

Maximum shell length: 15 inches.

Habitat: Deserts and scrub lands.

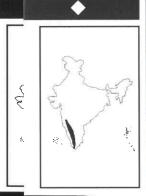
Protection status: CITES: Appendix-II.

WLPA: Schedule-IV. IUCN: Vulnerable.

Occurrence in PAs: Jaisamand WLS (Rajasthan), Sasan Gir NP

(Gujarat), Marine NP (Tamil Nadu), Kallakad WLS, Mudumalai WLS, Point Calimere WLS

(Tamil Nadu), Chinnal WLS (Kerala).







#### Travancore tortoise Indotestudo forstenii

Local name: Malyalam: Churelkata amah. Tamil: Peria aamai.

Identification points: • Depressed and elongated carapace.

Tail ends in a claw like spur.

Upper jaw slightly hooked.

 Carapace and plastron yellow or olive with black blotches.

☼ Limbs scaly and yellow, head yellowish brown.

Maximum shell length: 12.5 inches.

Habitat: Open rocky hills of evergreen and semi-

evergreen forests.

Protection status : *CITES:* Appendix-II.

WLPA: Schedule-IV.

IUCN: Low risk, near threatened.

Occurrence in PAs: Peppara-Neyyal WLS, Peechi-Vazhani WLS,

Parambikulam WLS, Idukki WLS (Kerala),

Indira Gandhi WLS (Tamil Nadu).

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