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THE TURTLE RESOURCES OF INDIA

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INTRODUCTION

Turtle* is the term used for a group of reptiles of the order Testudinata whose members are recognised by their short wide bodies encased in a protective armour, the shell, which is composed of the dorsal carapace and the ventral plastron. They are devoid of teeth but provided with the horny sheaths. The body is covered with polygonal scutes or scales or a leathery skin.

The turtle resources of our coasts, islands and inland waters are extremely rich. Their systematics, distribution, biology and prospects of farming for food and export are briefly discussed in this article.

The turtles are included in the families Emydidae (Fresh-water Tortoises), Trionychidae (Mud Turtles), Testudinidae (Land Tortoises), and Dermochelidae and Cheloniidae (Marine Turtles). They can be recognised by the following key:

* The word "turtle" is generally used to denote semi-aquatic and marine species, "terrapin" to the hard-shelled fresh-water species that are edible and "tortoise" to the strictly terrestrial species.

KEY TO THE FAMILIES

1. Limbs paddle-shaped 2
 Limbs not paddle-shaped 3
2. Limbs clawless; shell covered with smooth skin Dermochelidae
Dermochelys coriacea
(Leatherback Turtle)
 Limbs clawed; shell covered with horny shields Cheloniidae
(Marine Turtles)
3. Digits with four or five claws: shell covered with horny shields 4
 Digits with three claws: shell covered with smooth skin Trionychidae
(Mud Turtles)
4. Limbs more or less flattened; digits webbed Emydidae
(Fresh-water Tortoises)
 Limbs more or less cylindrical: digits not webbed Testudinidae
(Land Tortoises)

KEY TO THE SPECIES OF MARINE TURTLES
(Cheloniidae)

- 1 Four pairs of costal shields 2
Five or more pairs of costal shields 3
- 2 Dorsal shields imbricated, jaws hooked *Eretmochelys imbricata* (Hawksbill Turtle)
- Dorsal shields juxtaposed, jaws hooked *Chelonia mydas* (Green Turtle)
- 3 Four pairs of infra-marginal laminae, most with pores at their posterior edge *Lepidochelys olivacea* (Olive Ridley Turtle)
- 4 Three pairs of infra-marginal laminae, without pores *Caretta caretta gigas* (Logger head Turtle)

KEY TO THE SPECIES OF FRESH-WATER TORTOISES
(Emydidae)

- 1 Hexagonal neural plates short-sided behind *Geoemyda trijuga*
- Hexagonal neural plates short-sided in front 2
- 2 Fore-limb with 4 claws *Batagur baska*
- Fore-limb with 5 claws 3
- 3 Fourth vertebral shield not longer than third *Herdella thurgi* (Brahminy River Turtle)
- Fourth vertebral shield elongate, much longer than third 4
- 4 26 marginal shields *Kachuga sylhetensis*
- 24 marginal shields 5

- 5 Neural plates much longer than broad *K. smithi* (Brown River Turtles)
- Neural plates not longer than broad *K. tectum* (Indian Sawback Turtle)
- 6 Second vertebral shield pointed and produced behind *K. dhongoka*
- Second vertebral shield with straight transverse posterior border 7
- 7 Choanae behind the level of the eyes *K. bachuga*
- Choanae on a level with middle of the eyes *K. trivittata*

KEY TO THE SPECIES OF MUD TURTLES
(Trionychidae)

- 1 Plastron with a cutaneous femoral valve *Lissemys punctata* (Indian Flapshell Turtle)
- Plastron without cutaneous femoral valves 2
- 2 Orbit nearer the nasal than the temporal fossa *Chitra indica* (Narrow-headed soft-shell Turtle)
- Orbit nearer the temporal than the nasal fossa 3
- 3 Alveolar surface of mandible raised at its inner margin *Trionyx gangeticus* (Indian Soft-shell Turtle)
- Alveolar surface of mandible not raised at its lower margin 4
- 4 Head with black streaks *T. leithi*
- Head marbled with black and yellow *T. hurum*

KEY TO THE SPECIES OF LAND TORTOISES
(Testudinidae)

- | | | | |
|---|---|---|---|
| 1 | Fore-limb with four claws;
two supraaual shields | <i>Testudo emys</i> | |
| | Fore-limb with five
claws: supracaudal
shield single | | 2 |
| 2 | Vertebral and costal
shields forming distinct
humps in the
adult | <i>T. elegans</i>
(Starred Tortoise) | |
| | Vertebral and costal
shields not humped | <i>T. travancorica</i> | |

SYSTEMATICS

MARINE TURTLES

Family 1. CHELONIIDAE

The sea turtles are rivalled only by the sea snakes in adapting perfectly to the aquatic environment. With their forefeet modified as flippers, they have also developed an efficient swimming stroke.

1. *Chelonia mydas* (Linnaeus)
(Green Turtle)

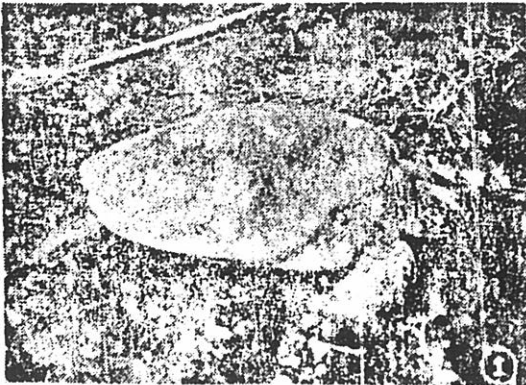


Fig. 1. Green Turtle (*Chelonia mydas*)

Synonyms: *Testudo mydas* Linnaeus

Description: Four pairs of costal shields; carapace not completely ossified. Numerous choanal papillae and single clawed flippers. Jaws not hooked.

Mottled greenish above, yellowish below. Half-grown specimens bear radiate patterns on the carapace and are referred to as "Sunray turtles". The popular name of Green Turtle is due to the olive taint that suffuses the dorsal aspect of the adult. May attain a weight of over 250 kg and a carapace length of about 120 cm. A female of this species is said to attain maturity when its carapace is one metre in length.

Distribution: The Green Turtle usually inhabits shallow waters less than 25 metres in depth and prefers areas sheltered by reefs where it feeds on algae. Generally distributed throughout the Indian and Pacific Oceans, it is found in abundance in and around the Krusadai and the Andaman-Nicobar group of Islands.

Economic importance: The Green Turtle is considered one of the most valuable of all living marine reptiles of the world because its flesh has long been known as a delicacy. The flesh of this turtle is good to eat and is also the main source of the famous 'turtle soup' on account of which the turtle itself is called by Germans as "Suppenchild krote" (Soup turtle). In addition to its flesh, the eggs of a Green Turtle are a staple diet for natives in several parts of the world. Green Turtles are also sought for their oil which is used in the manufacture of cosmetics. Recently

a new use has been found even for the baby turtles. They are killed, cured, stuffed and sold as ornaments. Everything, except the shell, is edible. The blood of this turtle is also in demand in Tuticorin where it is believed by the locals to be an elixir.

2. *Eretmochelys imbricata* (Linnaeus)

(Hawksbill Turtle, Caret, "Tortoise Shell Turtle)

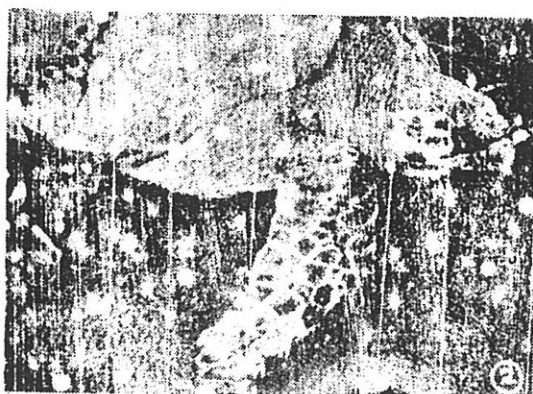


Fig. 2. Hawksbill Turtle (*Eretmochelys imbricata*)

Synonyms: *Testudo imbricata* Linnaeus.

Description: The Hawksbill derives its popular name from its compressed bird-like beak and slender head. Shields of the carapace strongly overlapping. Two claws on the front flippers. Colour is olive, with dark brown to black markings. May attain a weight of about 125 kg. and a carapace length of about 85 cm.

Distribution: Tropical and subtropical seas. Not so plentiful as the Green Turtle or the Loggerhead.

Economic importance: The Hawksbill Turtle, although not eaten, is famous for

its dermal plates which are used to make the famous tortoise shell. This shell, known as 'Caret' in trade, is probably the most famous product derived from turtles. It is said that the best tortoise shell (actually turtle shell) comes from the species of the Indian Ocean.

3. *Caretta caretta gigas* Deraniyagala (Loggerhead Turtle)



Fig. 3. Loggerhead Turtle (*Caretta caretta gigas*)

Synonyms: *Testudo caretta* Linnaeus.

Description: It is said to be the largest member of its family. May attain a weight of over 400 kg. and a carapace length of about 90 cm. Five or more pairs of costal shields. Complete adult ossification of the carapace. Colour is brownish.

Distribution: Pacific and Indian Oceans. It is particularly abundant in the vicinity of Andaman Islands and on the coast of Sri Lanka.

Economic importance: Though the flesh of this species is not edible, its eggs are much relished and sought after. The shells

can be put to good use in the preparation of crude ornaments.

4. *Lepidochelys olivacea* (Eschschlotz)
(Pacific Ridley Turtle, Olive Ridley Turtle, Olive Loggerhead)

Synonyms: *Chelonia olivacea* Eschschlotz

Description: Smallest of the marine turtles, the maximum shield length upto 790 mm. More than five pairs of costals. Plastron with two tuberculate ridges in young, smooth in adult. Carapace of adult uniformly grey.

Distribution: Warmer parts of the Pacific and Indian Oceans.

Economic importance: The eggs of this turtle are considered a great delicacy.

Family 2. DERMOCHELIDAE

5. *Dermochelys coriacea* (Linnaeus)

(Leatherback Turtle, Leathery Turtle, Luth, Trunk Turtle)



4: Leatherback Turtle (*Dermochelys coriacea*)

Synonyms: *Testudo coriacea* Linnaeus

Description: The ribs and vertebrae are free from the exoskeleton and the carapace is covered by a leathery integument that unites a mosaic of small separate bones. There are seven prominent ridges along the dorsum and five ventrally. The limbs are clawless. The adult colouring is dark brown.

It is the largest of all chelonians attaining a weight of three-quarters of a ton; this places it second only in size to the estuarine crocodile. It grows up to and beyond 2 metres in length.

Distribution: It is generally distributed in the tropics, but appears to be scarce everywhere, except on the coasts of Sri Lanka. It is only an accidental visitor to the temperate regions, it used to frequent the out skirts of the Tangasseri Reef, off the Coast of Quilon, Kerala. Recently a specimen was stranded off Calicut.

Economic importance: The flesh is not edible but the eggs are considered a delicacy when fresh. Also, oil is extracted from the eggs. The skin is also of good value.

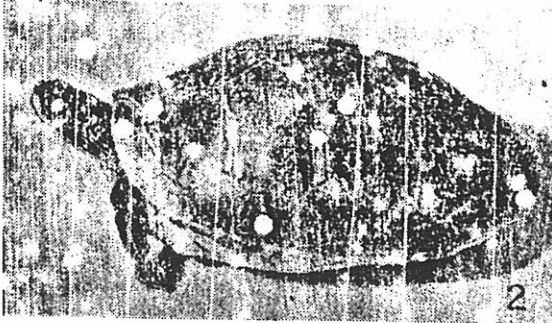
FRESH-WATER TORTOISES

Family 3. EMYDIDAE

The family Emydidae comprise the large group commonly known as the Fresh-water Tortoises. They are characterised by a neck completely retractile within the shell and a head covered with smooth skin or with the posterior part of it divided into shields.

6. *Kachuga tectum* (Gray)

(Indian Sawback Turtle)



2. Indian Sawback Turtle (*Kachuga tectum*)

Synonyms : *Emys tecta* Gray

Description : Shell higher and less tapering. Third central lamina pentagonal pointed posteriorly. Carapace rich dark brown. Colours of young more brilliant.

Distribution : This turtle inhabits the Ganges, Brahmaputra, and the Indus river systems of northern India.

7. *Kachuga smithi* (Gray)

(Brown River Turtle)

Synonyms : *Batagur smithii* Gray

Description : Carapace viewed from above ovoid. Third central lamina quadrangular to pentagonal. 24 marginals. Carapace olive brown in colour.

Distribution : The tributaries of the Indus. Much rare in the Ganges.

8. *Kachuga sylhetensis* (Jerdon)

Synonyms : *Pangasura sylhetensis* Jerdon

Description : Carapace elevated with a strong vertebral keel. Venter margin strongly serrated. 26 marginal shields. Shell olive brown above yellow below.

Distribution : Assam and Nagaland.

9. *Kachuga dhongoka* (Gray)

Synonyms : *Emys dhongoka* Gray.

Description : Third vertebral shield forming a broad suture with the fourth. Neural plates much longer than broad. Second vertebral shield pointed and produced behind, entering the third. Humeropectoral suture straight.

Distribution : N. E. India.

10. *Kachuga kachuga* (Gray)

Synonyms : *Emys kachuga* (Gray)

Description : Carapace depressed, unicarinate. Nuchal shield moderate. Plastron long and narrow. Humeropectoral suture curved. Shell olivaceous or brownish above, yellowish below.

Distribution : The Gangetic river system of Bengal and U. P. Its reported occurrence in the Krishna and Godavary rivers needs confirmation.

11. *Kachuga trivittata* Dumeril and Bibron

Description : Alveolar surface of upper jaw broad, the median ridge nearer and inner than the outer margin. Choanae on a level with the middle of the eyes. Shell of the male pale olive-green above, below pale orange-yellow and that of the female dark brownish, both above and below.

Distribution : N. E. India.

Economic importance : All the freshwater tortoises of the genus *Kachuga* are edible and much sought after for their flesh.

12. *Geoemyda trijuga* (Schweigger)

Synonyms : *Emys trijuga* Schweigger

Description : Plastron united to carapace by suture, colouration usually dark brown or black with a yellow border.

Distribution : This species is an inhabitant of still waters, ditches and ponds and is found in abundance in Maharashtra, Tamil Nadu and also in some parts of Karnataka. A sub species *Geomyda trijuga thermalis* (Lesson) is confined to Ramnad Dt., (Tamil Nadu) and Sri Lanka.

Economic importance : Both the species are edible and much hunted for their flesh.

13. *Hardella thurgi* (Gray)

(Brahminy River Turtle)

Synonyms : *Emys thurgi* Gray

Description : Fourth vertebral shield not longer than broad, not longer than third, Fore-limb with five claws.

Distribution : The Ganges, Brahmaputra and the Indus river systems.

Economic importance : This species is edible and is brought to the Calcutta market in large numbers for sale.

14. *Batagur baska* (Gray)

Synonyms : *Emys baska* Gray

Description : Entoplastron anterior to the humeropectoral suture; alveolar of jaws broad, with one or two median ridges. Forelimb with four claws.

Distribution : Bengal, Burma to Cochinchina and the Malay Peninsula; Sumatra.

Economic importance : The flesh of this species is relished very much by Burmese and is caught in large numbers by basket-traps. The carapace is of great value to the salt boilers.

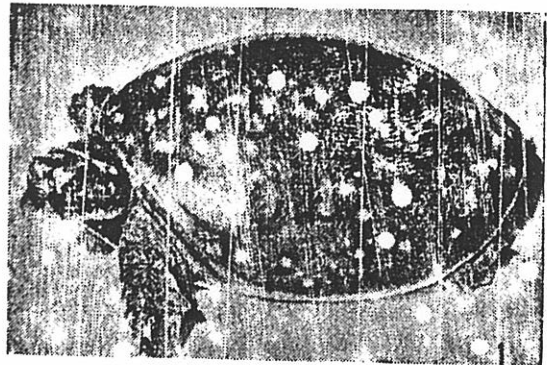
MUD TURTLES

Family 4. TRIONYCHIDAE

Of all the fresh-water Chelonians, the mud turtles are striking because of their soft shell. The body is flat and ovoid, with smooth and leathery skin. They have a scanty bony shell and only three inner digits have claws. The head is elongate and the snout tubular. They are largely the inhabitants of the rivers and lakes.

15. *Lissemys punctata punctata*
(Lacepede)

(Indian Flap-shell Turtle)



1. Indian Flap-shell Turtle (*Lissemys punctata*)

Synonyms : *Testudo punctata* Lacepede

Description : Plastron with a cutaneous femoral valve under which the hind limb can be concealed. Marginal bones present. Seven plastral callosities in the adult.

Distribution : The Ganges and the Indus river systems. A subspecies, *L. P. granosa*, is found in south India.

16. *Trionyx gangeticus* Cuvier
(Indian soft-shell Turtle)

Description : The carapace, Plastron, head and limbs are covered with smooth

integument. The limbs are flipper like and the digits are extensively webbed.

Distribution: The Ganges, the Indus, and the Mahanadi river systems.

17. *Trionyx hurum* Gray

Description: Carapace and plastron as in *T. gangeticus*. Head marbled with black and yellow.

Distribution: The lower reaches of the Ganges and the Brahmaputra.

18. *Trionyx leithi* Gray

Description: Head with black streaks. Disc of young with four or more ocelli.

Distribution: The Ganges and the rivers of Peninsular India as far south as Madras.

19. *Chitra indica* (Gray)

(Narrow-Headed Soft-shell Turtle)

Synonyms: *Trionyx indicus* Gray

Description: Head rather long, narrow and flat. Eyes dorsolateral. Limbs more flipper like and nails shorter. One of the largest freshwater turtles attaining a disc length of 800 mm.

Distribution: The Ganges, Sutlej and Indus rivers.

Economic importance: Amongst the mud turtles, species of *Trionyx* and *Lissemys* are mostly edible. A regular trade in these two species, *Trionyx hurum* and *Lissemys punctata*, exists in the Calcutta markets where they are readily sold. In south India, the Indian Flapshell Turtle (*Lissemys punctata*) is consumed in large numbers. The meat of the Indian Softshell Turtle, *Trionyx gangeticus*, is said to possess an excellent flavour, resembling that of beef. Considerable numbers of the species, *Chitra indica* are also taken as food wherever it occurs.

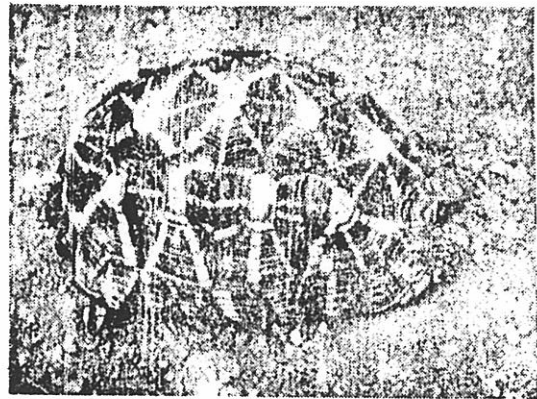
LAND TORTOISES

Family 5. TESTUDINIDAE

The true land tortoises are included in the family Testudinidae. The feet of these animals are club-shaped, short and broad, with not more than two phalanges in any digit. The toes are webless. The hind legs are covered with enlarged, often bony, scales.

20. *Testudo elegans* (Schoepff)

(The Indian Star Tortoise)



Land Tortoise (*Testudo elegans*)

Description: Mostly terrestrial in habit. Hind limbs columnar. Anterior surface of forelimbs covered by heavy scales. Toes webless. Plastron firmly united to carapace. Shell black above, each vertebral and costal shield with a yellow areola from which radiate yellow streaks.

Distribution: The Star Tortoise is distributed throughout the central and southern India.

21. *Testudo travancorica* Boulenger

Description: Carapace yellow with black blotches. No nuchal shield. Entoplastron intersected by humero-pectoral suture.

Distribution: Travancore Hills upto an altitude of 1000 metres. Also from Cochin on the western slopes and Coorg on the eastern slopes of the Western Ghats.

22. *Testudo emys* Schlegel and Muller

Description: Largest of the Asiatic species of *Testudo*. Carapace convex, dark brown or blackish. Nuchal shield moderate. Plastron larger than the carapace.

Distribution: Assam, Nagaland, Burma, Thailand and Malaysia.

Economic importance: The land tortoises because of their conspicuous size and slow movement render themselves an easy prey. The flesh of the two species, *Testudo elegans* and *T. emys* are relished very much by the people of Bengal and forms the staple food of the tribals of Bihar. Live tortoises because of their beautiful colour pattern and gentle disposition are considered as ideal pets and are exported in good numbers to foreign countries. They become so tame that they learn to respond to the keeper's gestures to feed when called.

ECOLOGY

Very little investigation has so far been carried out on the food and feeding habits, growth rate and on the breeding behaviour of turtles which are essential in any attempt aimed at exploitation of our turtle resources in a rational manner.

Food and Feeding habits: The green turtle is known to swim remarkably well and is often found far out in the sea, but is primarily a coastal animal feeding upon eel grass and other algae. In captivity the young ones feed upon fish, meat, and even on grass. The Hawksbills and Ridelys are omnivorous while the Loggerheads are carnivorous. The food of the freshwater tortoises are also varied. Some species are strictly herbivorous others are carnivorous and still others seem to prefer a mixed diet.

Amongst mud turtles, most species are carnivorous, generally lying concealed in the bottom mud or sand and preying on organisms that pass over them. They feed largely upon fish, molluscs, frogs, etc., but they are not particular whether their food is alive or dead. In captivity they are said to devour rice, bread, sweetmeats, and other plant food. The land tortoises are largely herbivorous. Even in the rocky situations and sandy tracts where the only water supply is brackish, the tortoises get on well. However, in captivity they drink large quantities of freshwater daily.

Breeding behaviour: Marine turtles lay many more eggs than the freshwater and land forms which fact gives us some clue to the extent of hazards faced by the developing young. They visit the land only at nights during breeding season. The Green Turtle lays eggs all round the year. A female of this species lays between 600-800 eggs in an year in batches of about 150 eggs each at fortnightly intervals. All the young of one batch hatch out after a period of incubation lasting from 40 to 50 days and as soon as they emerge from the sand they run straight to the sea and do not stop swimming to rest or feed for several days. The young ones remain in the open sea until they are about a year old during which period, many of them are eaten up by predators. According to experts like Bustard (Australian Fisheries, 1972) only one percent survives to return at the beginning of the second year to shallow waters. The Loggerhead lays eggs during September to December while May and June are the months of oviposition for the giant Leather back. The egg clusters of marine turtles are concentrated in a small area above the high tide mark on the nesting beaches.

Majority of the freshwater tortoises lay relatively few but rather large eggs. In spite of their relatively large size, most female tortoises lay few eggs in a single clutch,

usually less than seven. *Batagar buska*, the estuarine tortoise, which is trapped in large numbers by Burmese for the sake of its flesh, lays between 50 and 60 eggs in three batches, during January - February, the whole process being completed in about 6 weeks.

FISHING

Fishing of the marine turtles has been in vogue in India from time immemorial. The chief fishing areas are the Krusadai Island, Tuticorin, and Rameshwaram. The landing figures per year of the edible turtle between Pamban and Cape Comorin are on an average of about 3,000 to 4,000. About 1,000 turtles are annually landed in the Krusadai area itself. In Tuticorin, the edible green turtles are caught in large numbers in heavy nets operated in and around the reefs of small islands between Tuticorin and Pamban. They are sent alive upside down from the Islands to Coastal towns by train where they are kept in pens for marketing. The landings of the sea turtles on the west coast of India is however, insignificant.

The vast possibilities of increasing the catches of the edible and other turtles in the remote Islands of the Andamans and Nicobars and Laccadive islands have not yet been studied. Even the commercially more important Hawksbill Turtle, found in fairly good numbers on both the coasts of India remains unexploited.

TURTLE FARMING

Turtle farming has so far not been attempted in India though considerable scope exists for turtle farming in the remote islands of the Andaman-Nicobar, especially the Ritchies Archipelago in the Andaman group where the Green turtles are known to regularly visit the undisturbed sandy beaches for nesting purpose. There

may be other nesting grounds in the Andaman and Nicobar group or in the Laccadive group which have to be located for the availability of little turtles is the primary requisite for any successful turtle farming. Another important point to be considered in turtle farming is finding out the suitable areas where turtle-grass pasture is available in abundance. The feeding habit, as has been pointed out, is very unique and probably it is the only big edible animal that thrives on the submarine grazing niche. Much of the best turtle-grass pastures lies among reefs or archipelago and grows under only a few feet of water and such pastoral grounds are not wanting in the Andaman-Nicobar group of islands.

In turtle farming the young hatchlings are generally kept in small pens preferably of rectangular cement tanks and fed on a well balanced diet of whole animals ground to bite-size. These are then stocked in suitably enclosed big tracts of creeks keeping them safe from predators.

Turtle farming is an ideal industry involving very little capital expenditure but has several benefits the most important being the feeding of the fast growing human population and conservation of the natural population. In nature during the period of the young turtle's life in the open sea more than 90% of them are eaten up by predators. Through organised farming the conservation of the species becomes possible. It can best be achieved by releasing a small number of the young ones reared in the farms in the sea to build up the wild stock.

ACKNOWLEDGEMENTS

The authors are thankful to Shri Kochu Govindan, Deputy Director, the Marine Products Export Development Authority, Madras-6, for the export figures of Turtles and their products given in the Appendix.

APPENDIX

Table 1. Export figures of edible Chelonians and their products

Q : Quantity in kgs. of product wt.
V : Value in Rs. (F. O. B.)

Products		1974	1973	1972	1971	
I. Turtle Meat						
a) Japan	Q :	...	100	...	...
	V :	...	6,550	...	...
b) E. Germany	Q :	811	...	...	...
	V :	30,331	...	...	...
c) Switzerland	Q :	...	63	...	...
	V :	...	3,300	...	...
d) U. K.	Q :	...	...	595	...
	V :	...	...	13,109	...
e) U. S. A.	Q :	...	...	...	125
	V :	...	...	...	3,681
f) W. Germany	Q :	980	2,304	500	2,455	
	V :	19,687	69,328	10,380	69,995	
Total :		Q :	1,791	2,467	1,095	2,580
		V :	50,018	79,178	23,489	73,676
II. Turtle Shell :						
France	Q :	70	...	...	...
	V :	2,100	...	...	...
III. Turtles (Green Turtle)						
W. Germany	Q :	76	...	...	...
	V :	3,907	...	...	...
IV. Tortoise Shell :						
a) France	Q :	...	...	2	...
	V :	...	...	227	...
b) Hong Kong	Q :	...	N. A.	...	...
	V :	...	16,605	...	...
c) Italy	Q :	...	780	107	...	
	V :	...	70,206	9,269	...	
d) Japan	Q :	10	200	100	205	
	V :	1,800	24,148	3,300	14,562	
e) Netherlands	Q :	...	...	325	...
	V :	...	...	3,342	...
f) Singapore	Q :	...	214	...	...
	V :	...	3,010	...	...
g) Spain	Q :	...	...	202	...
	V :	...	...	1,974	...
h) W. Germany	Q :	53	20	40	78	
	V :	9,376	1,567	1,154	4,655	
Total :		Q :	63	1,214	776	283
		V :	11,176	1,15,536	19,266	19,217

Products		1974	1973	1972	1971
V. Tortoise Meat					
W. Germany	Q :	...	800	400	1,732
	V :	...	18,776	9,710	30,817
VI. Living Tortoise :					
a) France	Q :	...	...	N. A.	...
	V :	...	...	1,620	...
b) Italy	Q :	...	...	N. A.	N. A.
	V :	...	...	1,243	2,635
c) Japan	Q :	...	...	N. A.	N. A.
	V :	...	...	2,068	1,350
d) Netherlands	Q :	17	...	...	N. A.
	V :	600	...	...	570
e) Switzerland	Q :	18	...	...	...
	V :	498	...	...	...
f) U. S. A.	Q :	...	...	N. A.	N. A.
	V :	...	...	281	795
g) U. K.	Q :	...	...	...	N. A.
	V :	...	...	...	650
h) W. Germany	Q :	145	...	N. A.	N. A.
	V :	3,779	...	5,501	2,975
Total :	Q :	180	...	N. A.	N. A.
	V :	4,877	...	10,713	8,975
VII. Tortoise Belly					
a) Japan	Q :	...	...	100	...
	V :	...	...	3,420	...
b) Singapore	Q :	...	...	...	25
	V :	...	...	...	740
Total :	Q :	...	...	100	25
	V :	...	...	3,420	740
VIII. Tortoise skin :					
Singapore	Q :	442	...	...	...
	V :	2,240	...	...	...

- Notes :
1. N. A. - Not available
 2. - - No exports
 3. The figures are compiled from the daily list of exports issued by the various customs houses in India.