

Reptilia

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The air-breathing, ectothermic (cold-blooded) vertebrate animals which are characterized by laying shelled eggs and having skin covered in scales and/or scutes. They are creeping tetrapods, either having four limbs or being descended from four-limbed ancestors. They were evolved around 320-310 million years ago during the Carboniferous period. The largest reptile is *Crocodylus porosus* and the smallest one is *Sphaerodactylus ariasae*. The living reptilians are grouped under four orders.

1. **Order Testudines** (*Turtles*)
2. **Order Rhynchocephala** (*Tuataras*)
3. **Order Squamata** (*Snakes, lizards, and worm lizards*)
 - i. **Suborder Lacertilia** (*Lizards*)
 - ii. **Suborder Amphisbaenia** (*worm lizards*)
 - iii. **Suborder Serpentes** (*Snakes*)
4. **Order Crocodilia** (*Crocodiles*)

sea Turtles

Kingdom : [Animalia](#)
Phylum : Chordata
Subphylum : Vertebrata
Class : Reptilia
Subclass : Anapsida
Order : Testudines
Family : Cheloniidae

Subclass: Anapsida

They are primitive reptiles with a solid skull roof.

ORDER - TESTUDINES

This order includes all turtles and tortoises. It is divided into three suborders:

1. **Pleurodira** (side-necked turtles)
2. **Cryptodira** (freshwater turtles, snapping turtles, tortoises, soft-shelled turtles, and sea turtles)
3. **Amphichelydia** (a suborder of turtles that is now extinct).

FAMILIES

Most scientists recognize seven species of sea turtles under two families:

1. Cheloniidae (all sea turtles with *scutes* (horny plates) covering their shells)

- Upper shell, or carapace quite flat rather than highly rounded; oval or heart-shaped
- Lower shell, or plastron, a bit smaller than in most turtles and attaches to the upper shell by tough but flexible tissues called ligaments
- Limbs are modified into flippers for swimming
- Unlike many other turtles, they cannot retract, or pull back, their limbs or heads into their shells.
- The family Cheloniidae contains six species under six genera.

Cheloniids are large turtles, ranging between 71 cm ([*Lepidochelys olivacea*](#)) and 213 cm ([*Caretta caretta*](#)) in maximum carapace length.

Species:

1. Green (*Chelonia mydas*); two subspecies of the green (*Chelonia mydas mydas*) and the black or Eastern Pacific green turtle (*Chelonia mydas agassizii*)
2. Loggerhead (*Caretta caretta*)
3. Kemp's ridley (*Lepidochelys kempii*)
4. Olive ridley (*Lepidochelys olivacea*)
5. Hawksbill (*Eretmochelys imbricate*)
6. Flatback (*Natator depressus*)

2. Dermochelyidae

- Scuteless turtles with only one modern species; the leatherback turtle - covered with leathery skin
- It is the only marine turtle whose backbone is not attached to the inside of its shell

Species:

1. Leatherback (*Dermochelys coriacea*) - the largest living turtle.

Fresh water chelonians called terrapins. *Trionyx* is a soft shelled fresh water edible terrapin.

Squamata Snakes and Lizards

Kingdom	: Animalia
Phylum	: Chordata
Subphylum	: Vertebrata
Class	: Reptilia
Order	: Squamata
Suborder	: Serpentes
Superfamily	: <u>Xenophidia</u> (Colubrids, vipers, and relatives)
Family	: Hydrophiidae (sea snakes)

17 genera and 51 species of true sea snakes are under this family

Example: *Aipysurus laevis* (common sea snake)

Order : Squamata

- It includes lizards and snakes.
- They are most successful living reptiles.
- Squamata are the reptiles in which the skull has lost both temporal vacuities. E.g.: snakes and some lizards.
- Cloacal aperture is transverse.

- Ribs are single headed.
- Quadrate is movable.
 - Vertebrae are procoelous.

Characters of true sea snakes

- Have a flattened body
- A short oarlike tail,
- Valvular nostrils on top of the snout
- Elongated lungs that extend the entire length of the body.
- Very small scales, usually not overlapping (juxtaposed), abutting against one another like paving stones.
- Reduced belly scales in primitive species; absent in more advanced forms
- Advanced species cannot crawl and are thus helpless on land.
- When swimming, a keel is formed along part of the belly, increasing surface area and aiding propulsion, which occurs by lateral undulation.
- Sea snakes can remain submerged for several hours, possibly as much as eight or more. This remarkable feat is partly due to the fact that they can breathe through their skin.

Family: Colubridae: Freshwater snakes:

- *Xenochrophis piscator* is a common species of non-venomous fresh water snake found in India.
- They can be identified by a uniform chess-board pattern of black spots on its body and has two tear-marks just below the eyes.
- Feeds mainly on small fishes and water frogs.