Classification of Amphibia

By-
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Subclass I. Stegocephalia

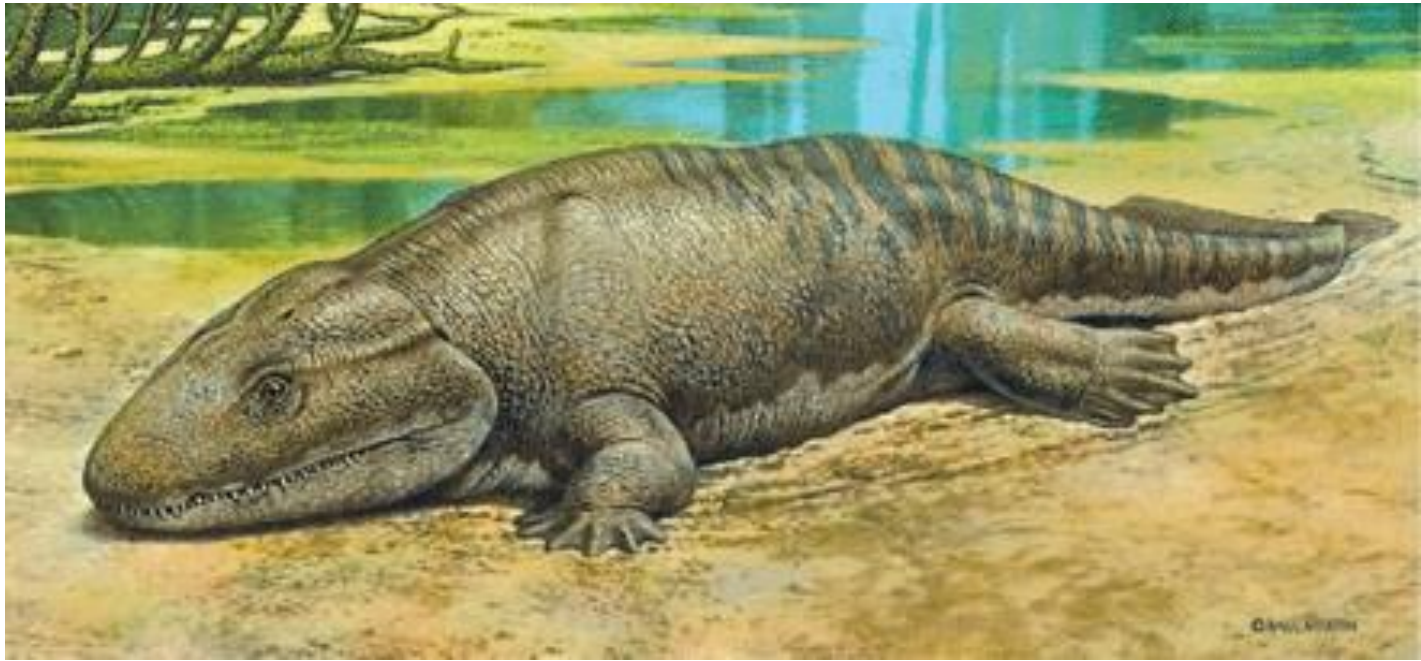
- Extinct Forms
- Present from Permian to Triassic.
- Limbs pentadactyle.
- Skin with scales and bony plates.
- Skull with a solid bony roof, leaving openings for eyes and nostrils.

Order 1. Labyrinthodontia

- Oldest known tetrapods called stem Amphibia.
- Freshwater or land forms.
- Salamander or crocodile like.
- Teeth large with characteristically much folded dentine similar to their crossopterygian ancestors.
- Extinct. Present during Carboniferous to Triassic.
- Example : *Eryops*

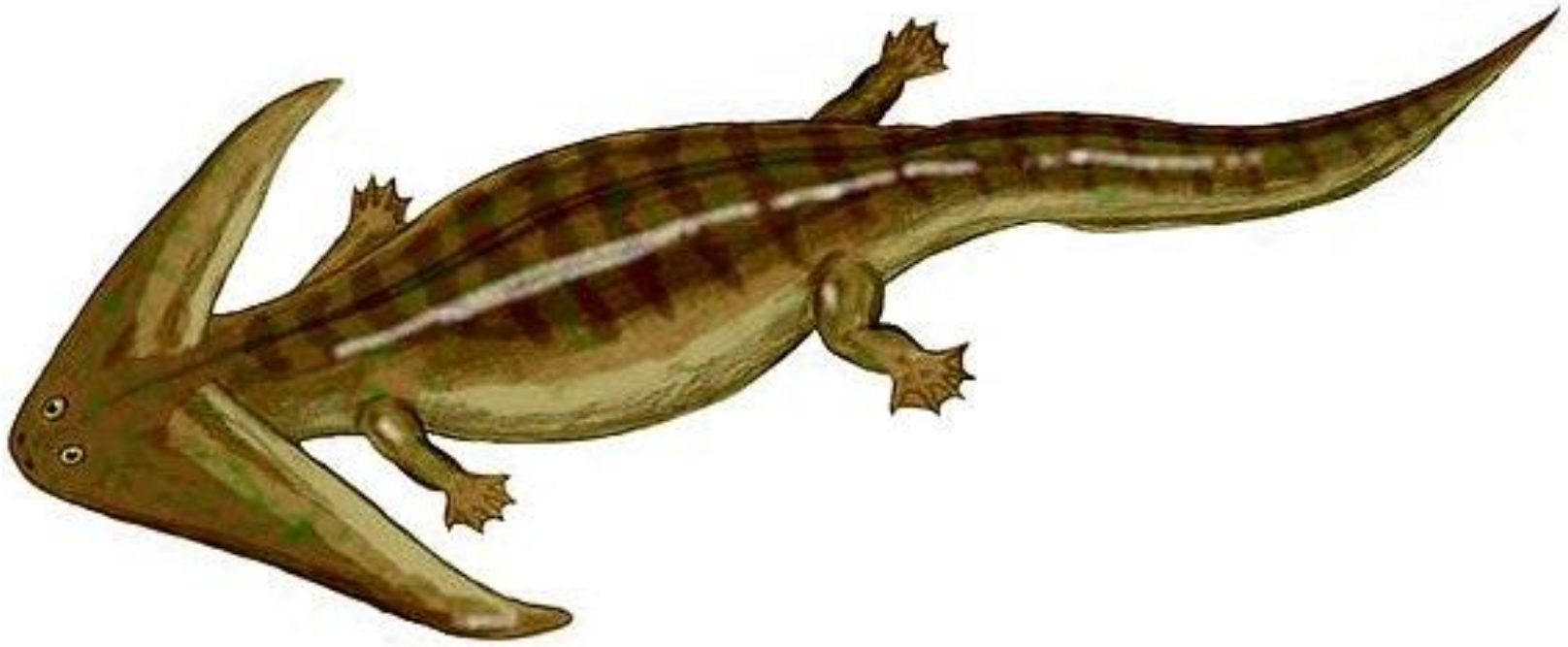
Order 2. Phyllospondyli

- Small salamander-like.
- Head large, flat.
- Believed to be ancestors of modern Urodela.
- Extinct. Present from Carboniferous to Permian.
- Example : *Ichthyostega*



Order 3. Lepospondvli

- Small salamander or eel-like.
- Regarded ancestral to modern caecilians (Gymnophiona).
- Carboniferous to Permian.
- Examples : *Diplocaulus*



Subclass II: Lissamphibia (living, smooth amphibian)

Modern Amphibia lacking dermal bony skeleton. Teeth small, simple.

Order I. Gymnophiona or Apoda

- Limbless, blind, elongated worm like, burrowing tropical forms known as caecilians.
- In some dermal scales embedded in skin which is wrinkled.
- Tail short or absent, cloaca terminal,
- Limb gridles absent.
- Examples : *Ichthyophis.*

Order 2: Urodela

- Lizard-like amphibians with a distinct tail.
- Limbs 2 pairs, usually weak, almost equal.
- Skin devoid of scales and tympanum.
- Gills permanent or lost in adult..
- Larvae aquatic, adult-like, with teeth.
- Example: *Salamandra* (salamander).

Order 3: Anura

- Specialized Amphibia without tail in adults.
- Hind limbs usually adapted for leaping and swimming.
- Eyelids well-formed. Tympanum present.
- Skin loosely-fitting, scaleless; Mandible toothless.
- Pectoral girdle bony. Ribs absent or reduced.
- Fully metamorphosed without neotenic forms.
- Adults without gills or gill openings.
- Fertilization always external.
- Example: *Hyla* (tree toad)

Thank you!