

## Lecture #22 – Squamates: Lizards & Snakes

### I. Lepidosauria

- A. Tail Autotomy (the loss of the tail)

### II. Sphenodonta

- A. Last surviving member of an ancient lineage
- B. Two species live in New Zealand
- C. Life History
  1. Cold weather adapted
  2. No copulatory organ, but internal fertilization
    - a. **Cloacal kiss**

### III. Squamata: Lizards & Snakes

- A. Evolutionary Diversity
  1. Greatest diversity among traditional "reptile" groups
  2. Lifestyles
    - a. Wait & Watch
      - 1) **Cryptic coloration**
      - 2) Defense strategies
    - b. Seek & Search
      - 1) Snake feeding
  3. Internal Fertilization
    - a. **Hemepenes**

Reading: Chapter 18 - pages 364-371.

Questions: Page 373 – 8, 9, 10, 13, 14, 16, and 17.

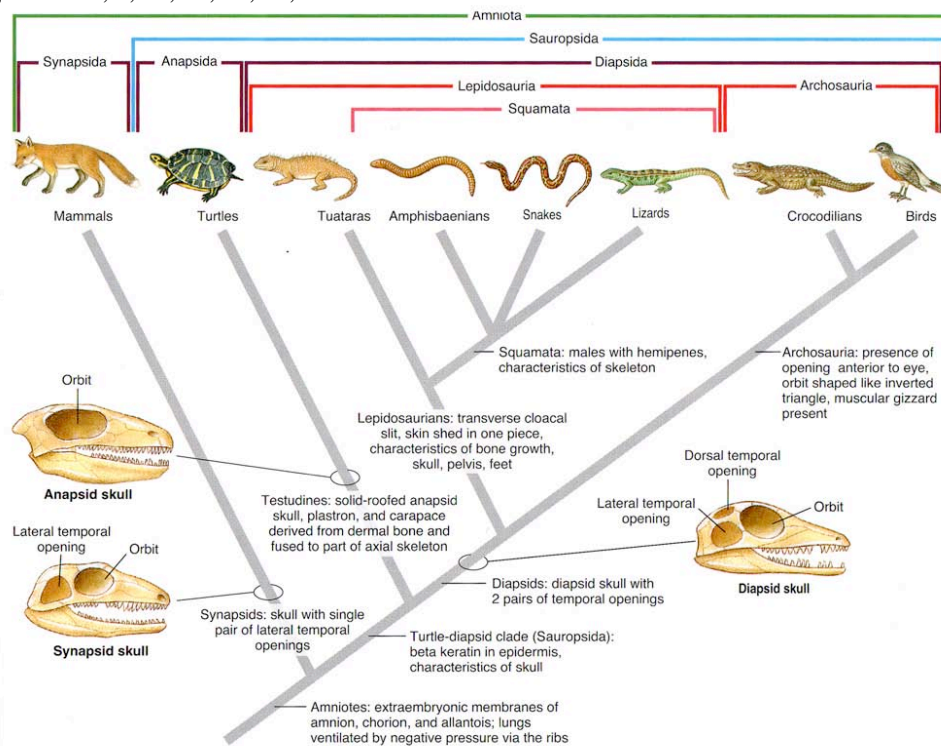


figure 18.2

Cladogram of the living Amniota showing monophyletic groups. Some shared derived characters (synapomorphies) of the groups are given. The skulls represent the ancestral condition of the three groups. Skulls of modern diapsids and synapsids are often highly modified by loss or fusion of skull bones, which obscures the ancestral condition. Representative skulls for anapsids are *Nyctiphructus* of the upper Permian; for diapsids, *Youngina* of the upper Permian; for synapsids, *Aerosaurus*, a pelycosaur of the lower Permian. The relationships expressed in this cladogram are tentative and controversial. Relationships among lizards, snakes, and amphisbaenians are uncertain, but evidence suggests that both amphisbaenians and snakes evolved within the lizard clade.