

Lab # 3: World Orders

Class Mammalia

Two sub-classes:

- Prototheria
- Theria
 - Infraclasses: Methatheria and Eutheria

Subclass Prototheria

Order Monotremata

- The monotremes: platypus and echidnas
 - No teeth
 - No cranial sutures in adults
 - Beak-like rostrum

Subclass Theria

--Infraclass Metatheria

- Orders Dasyuromorphia, Diprotodontia, and Peramelina

Order Dasyuromorphia

- Comprises most of the Australian carnivorous marsupials, including quolls, dunnarts, the numbat, the Tasmanian devil, and the recently extinct thylacine.
 - Typically I4/i3, except numbat
 - Convergent with carnivores

Order Diprotodontia

- Kangaroos and wallabies
 - Diastema
 - Lower incisors directed toward anterior, upper incisors sharp (adaptations for cropping plants)
 - Long, narrow rostrum typical

Subclass Theria

--Infraclass Eutheria

Order Cingulata

- Armadillos
 - Homodont dentition
 - No incisors or canines

Order Pilosa

- Anteaters and sloths
 - Teeth reduced or altogether absent
 - Zygomatic arch incomplete

Order Primates

- Apes, monkeys, tarsiers, prosimians
 - Orbits rotated forward
 - Large braincase

Order Tubulidentata

- Aardvarks
 - Elongated rostrum
 - No incisors or canines
 - Cheek teeth comprised of dentine prisms

Order Hyracoidea

- Hyraxes
 - Single pair of tusk-like upper incisors
 - Diastema
 - Lophodont molars

Order Cetacea

Suborders Odontoceti, Mysticeti

Suborder Odontoceti

- Toothed whales
 - Homodont dentition
 - Nares located dorsally

Suborder Mysticeti

- Baleen whales
 - Teeth absent in adults, replaced by baleen