

# Lab 8: Perissodactyla & Cetartiodactyla



Luxien Landrus, 11/7 and 11/8

# Announcements

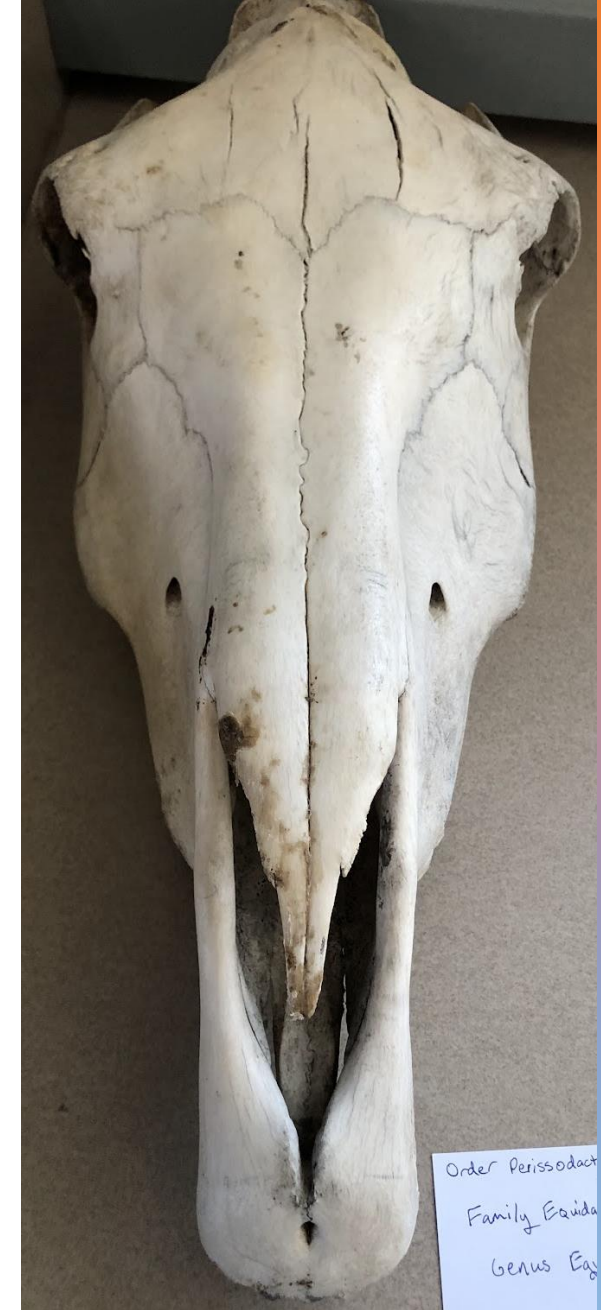
- Final lab!
- Only skulls; some skins are out, but just for fun
- Any skulls needed to species will have their species epithet on the slide

# Order Perissodactyla

Family Equidae (horses)

Genus *Equus*

- Very large skull, post-orbital bar, nasals form a sharp triangle



Order Perissodact  
Family Equida  
Genus Equ

# Order Cetartiodactyla

- Unknown whale tooth (looks like sperm whale photos from google)



# Order Cetartiodactyla

## Family Suidae

### Genus *Sus* (hog)

- Brain case highly elevated above rostrum
- Lower teeth more horizontal than vertical
- Well defined sutures



# Order Cetartiodactyla

## Family Tayassuidae

### Genus *Dicotyles* (collared peccary)

- Brain case elevated above rostrum
- Short tusks
- Incomplete post-orbital bar

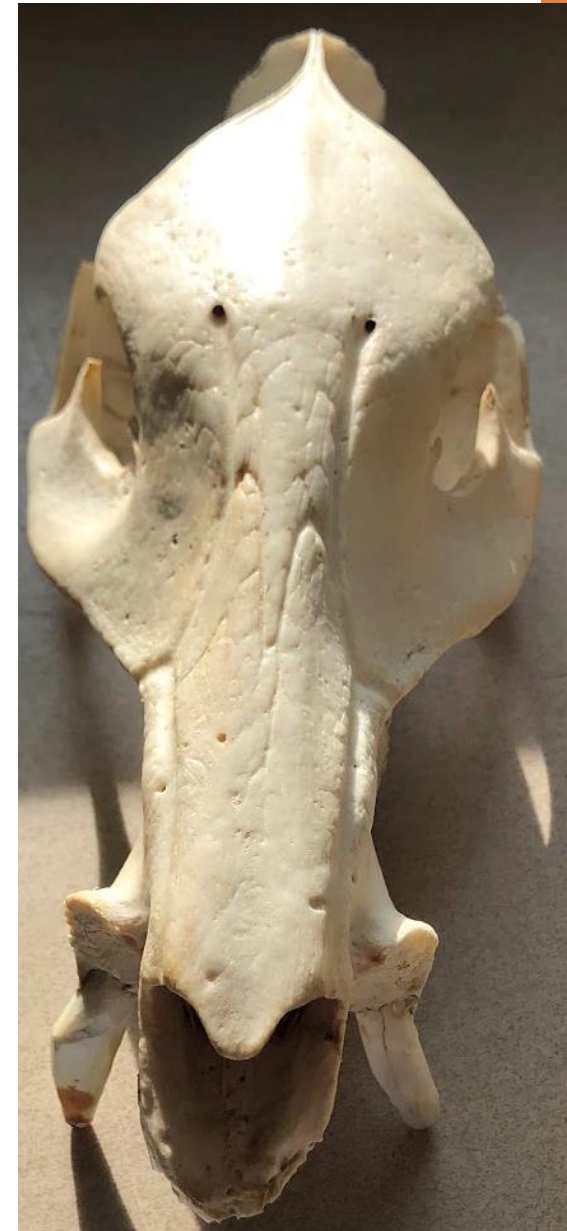


# Order Cetartiodactyla

## Family Tayassuidae

### Genus *Catagonus* (Chacoan peccary)

- Brain case level with rostrum
- Longer tusks than the other peccary
- Incomplete post-orbital bar
- Hourglass-shaped sagittal crest



# Order Cetartiodactyla

## Family Cervidae (deer)

### Genus *Odocoileus*

- *O. virginianus* (white-tailed deer) (left)
  - Know skulls with antlers to species
  - Antler prongs extend from one main “branch”
- *O. hemionus* (mule deer) (right)
  - Know skulls with antlers to species
  - Antler prongs fork independently; no main “branch”





# Order Cetartiodactyla

## Family Cervidae (deer)

### Genus *Alces* (moose)

- Nasals end way before the incisive foramina
- Palmate antlers
- Largest cervid



# Order Cetartiodactyla

## Family Cervidae (deer)

### Genus *Rangifer* (caribou)

- Antlers from 1892!
- Very cylindrical orbits



# Order Cetartiodactyla

## Family Cervidae (deer)

### Genus *Mazama* (brocket deer)

- Very short, unbranched antlers



# Order Cetartiodactyla

## Family Cervidae (deer)

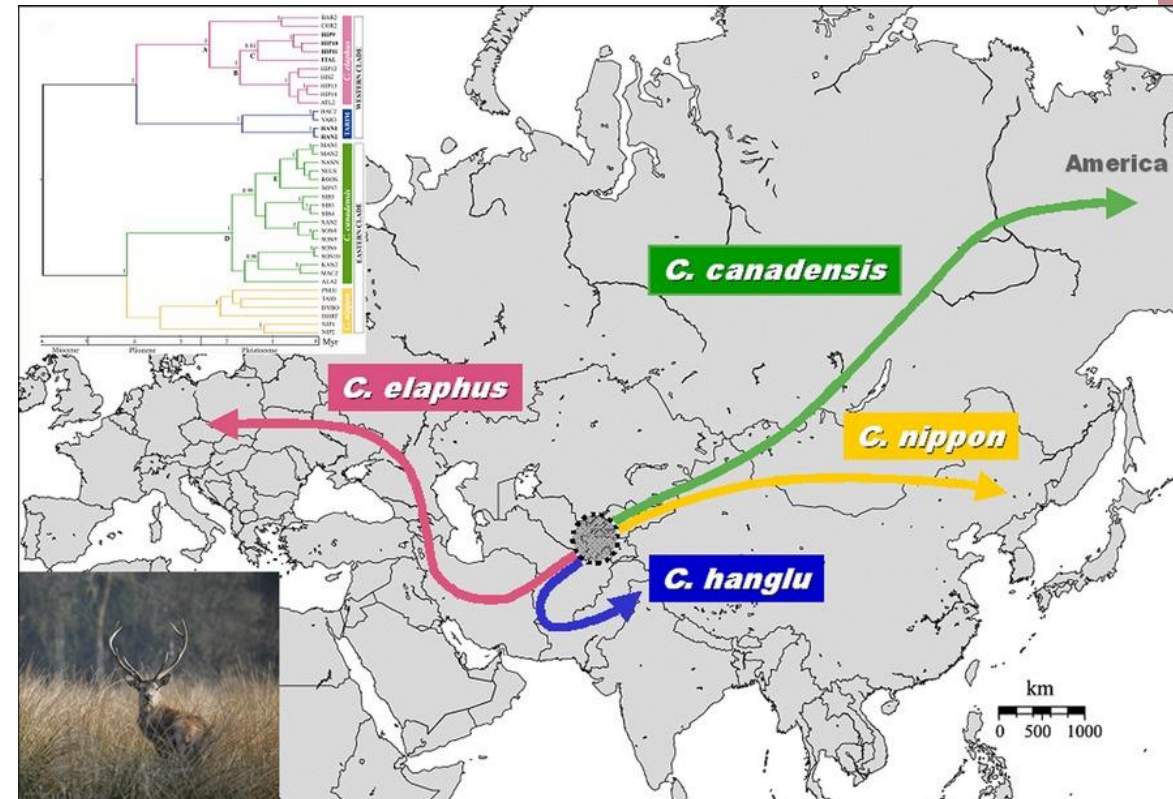
### Genus *Cervus* (elk, wapiti, red deer)

- Very long and thin paroccipital processes



# What's the deal with elk?

- “Elk”, “Red deer” and “Wapiti” were treated as the same species: *Cervus elaphus*
- Later discovered that another *Cervus* species, *C. nippon*, actually rendered *C. elaphus* paraphyletic
- *C. elaphus* is now used for the European populations, while *C. canadensis* is used for North American and East Asian populations
- Some papers still refer to *C. canadensis* as *C. elaphus*



# Order Cetartiodactyla

## Family Antilocapridae (pronghorn)

### Genus *Antilocapra*

- Crescent-shaped foramina between orbits
- Not an antelope!



# Order Cetartiodactyla

## Family Bovidae

### Genus *Bos*

- *Bos bison* (aka *Bison bison*) (right)
  - More cylindrical orbits
  - Bigger
- *Bos taurus* (cattle) (left)



**Order Cetartiodactyla**

**Family Bovidae**

**Genus *Syncerus* (African buffalo)**





# Order Cetartiodactyla

## Family Bovidae

### Genus *Ovis*

- *Ovis aries* (sheep)
- *Ovis canadensis* (bighorn sheep)



# Order Cetartiodactyla

## Family Bovidae

Genus *Oreamnos* (mountain goat) (left)

- Only slightly curved horns

Genus *Capra* (goat) (right)

- More curved horns; lots of variation

