Lab 7: Carnivora



Luxien Landrus, 10/31 and 11/1

Announcements

- Only 1 more lab after this!
- 2 review sessions before final
- Quiz 5 clarification
- This lab format: slides vs quizlet
- First lab to identify skull to species

Suborder Feliformia

Family Felidae

- Usually have a partial post-orbital bar
  - **Genus *Puma***
    - More oval orbit shape, triangular postorbital process

Suborder Feliformia

Family Felidae

- Usually have a partial post-orbital bar
  - **Genus *Lynx***
    - Smaller than ***Puma***, very circular orbits, longer post-orbital processes

Suborder Feliformia

Family Felidae

- Usually have a partial post-orbital bar
  - **Genus *Panthera***
    - Huge **Felidae** skull, very prominent sagittal crest, carnivorous molars

SKIN IDENTIFICATION

Suborder Feliformia

Family Felidae

- ***Leopardus pardalis*** (ocelot)
  - Less “thick” lines, bigger, more spots

- ***Leopardus wiedii*** (margay)
  - Thicker lines, smaller, less spots

Suborder Feliformia

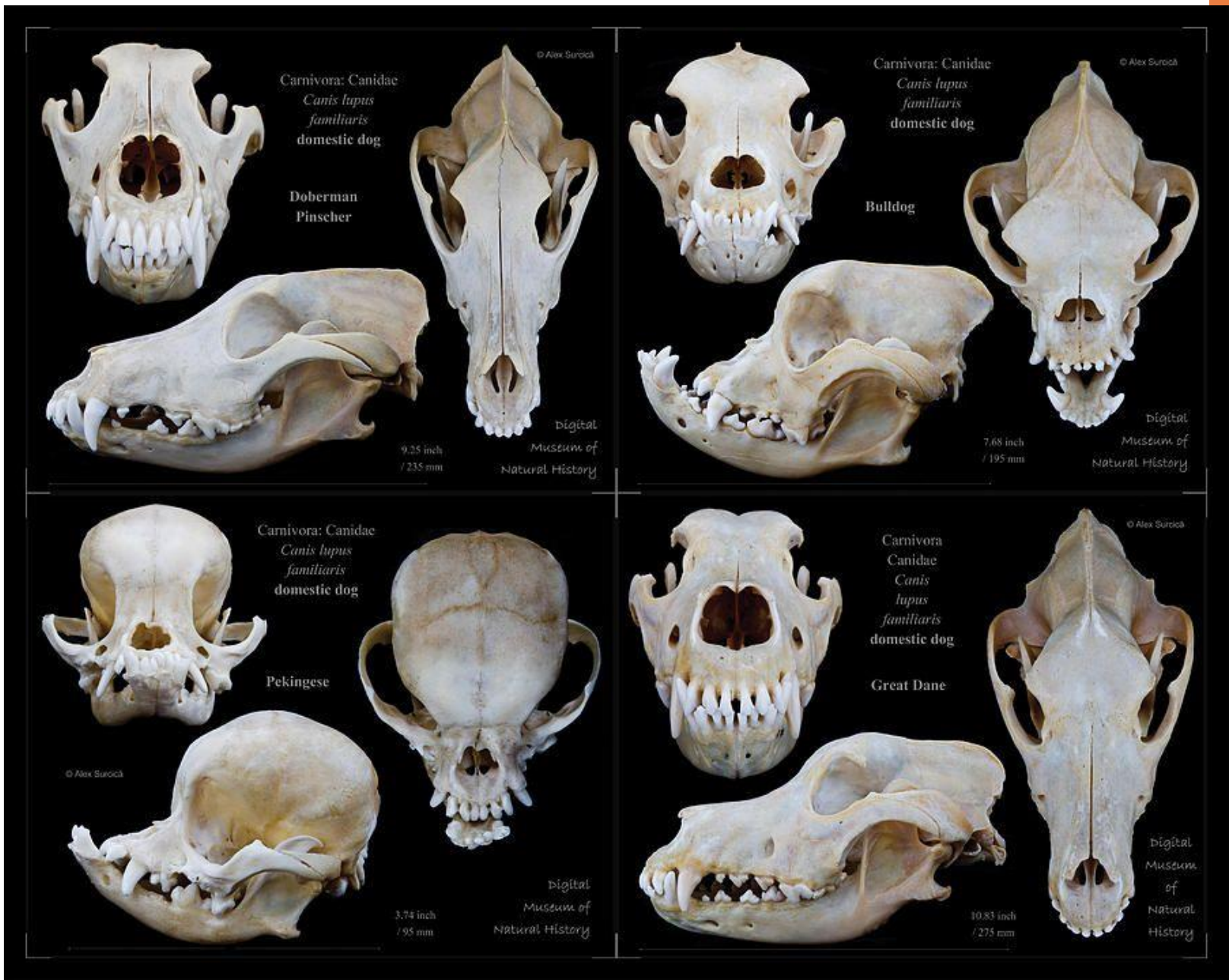
Family Herpestidae (mongooses)

- **Genus *Urva***
  - Complete post-orbital bar

Suborder Caniformia

Family Canidae

- **Genus *Canis***
  - Prominent paraoccipital processes



Suborder Caniformia

Family Canidae

- **Genus *Urocyon*** (grey fox)
  - "U" shaped temporal ridge

Suborder Caniformia

Family Ursidae (bears)

- **Genus *Ursus***

  "Shorter" sagittal crest and shorter post-orbital process than ***Panthera***

  - ***Ursus americanus*** (black bear)
    - Back molar <35mm long
  - ***Ursus arctos*** (brown bear)
    - Back molar >35mm long
  - ***Ursus maritimus*** (polar bear)
    - Huge

Suborder Caniformia

Family Ursidae (bears)

- **Genus *Ursus***
  - ***Ursus americanus*** (left)
  - ***Ursus arctos*** (right)

Suborder Caniformia

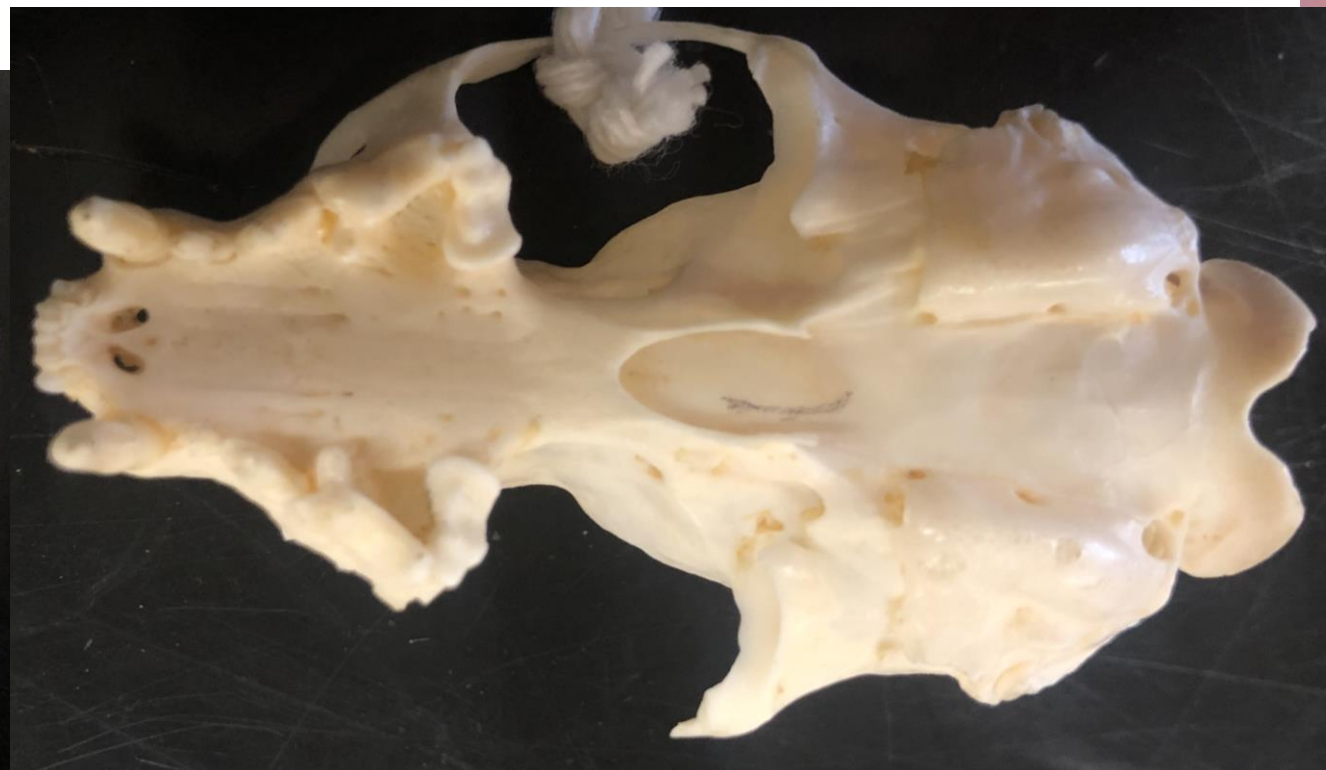
Family Procyonidae (racoons and kin)

- **Genus *Procyon*** (raccoon)
  - Prominent paraoccipital processes

Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Mustela***
  - Looks like a weasel skull
  - Thin, rounded zygomatic arch
  - Less broad back molar than ***Martes*** or ***Mephitis***, more prominent temporal ridges



SKIN IDENTIFICATION
Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Mustela***
  - ***Mustela frenata*** (long-tailed weasel)
  - ***Mustela erminea*** (ermine)
  - Look at tail to body ratio, belly color can help with summer variants
    - Both sexual dimorphism and coat seasonality
  - From left to right:
    - ***Mustela frenata*** unsexed, winter (probably male)
    - ***Mustela frenata*** female, summer
    - ***Mustela frenata*** male, summer
      Mustela erminea male, summer
      Mustela erminea unsexed, winter

Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Martes*** (marten)
  - Broad hind molar

Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Pekania*** (fisher)
  - Very large sagittal crest

Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Gulo*** (wolverine)
  - Similar to *Sarcophilus* skull, but no inflected angular process

Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Lontra*** (river otter)
  - Pointy molars
  - Can see infraorbital canals from above

Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Enhydra*** (Sea otter)
  - Uniquely shaped skull, very blunt molars

Suborder Caniformia

Family Mustelidae (weasels, badgers, otters, wolverine)

- **Genus *Taxidae*** (American badger)
  - Flat, “vertical” supraoccipital

Suborder Caniformia

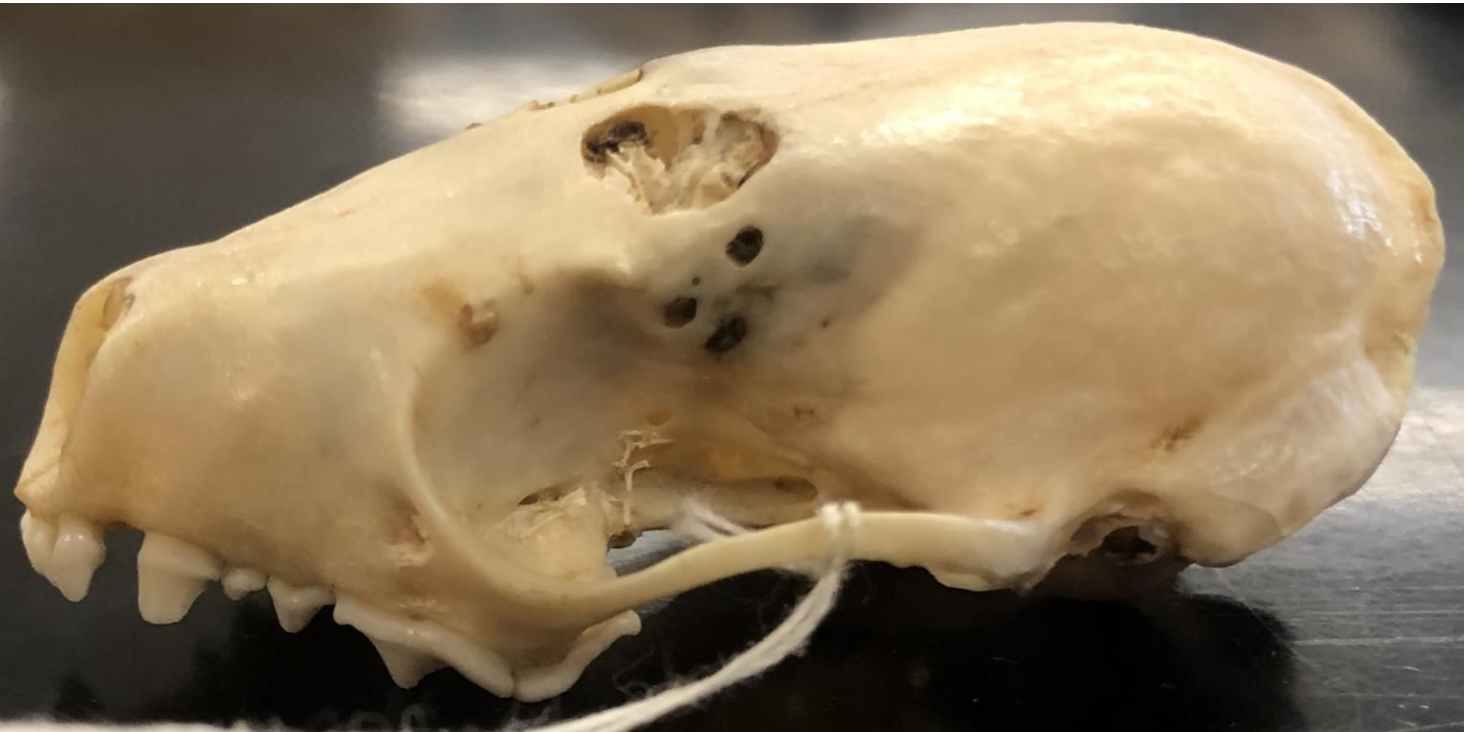
Family Mephitidae (skunks)

- **Genus *Mephitis*** (striped skunk)
  - Short, broad snout
  - 2nd from back molar pushes in
  - Sexual dimorphism!
    - Female: No sagittal crest (right)
    - Male: Prominent sagittal crest (left)

Suborder Caniformia

Family Mephitidae (skunks)

- **Genus *Spilogale*** (western spotted skunk)
  - ALL adults have these parasitic worm damage!



Suborder Caniformia

Family Otariidae

- **Genus *Zalophus*** (sea lion)
  - Large skull, very pointy teeth

Suborder Caniformia

Family Phocidae

- **Genus *Phoca*** (harbor seal)
  - Smaller skull, very pointy teeth

Suborder Caniformia

Family Odobenidae

- **Genus *Odobenus*** (walrus)

Quizlet for the Latin names of skins:

Includes suborder, family, genus and species for all skins, organized by common name

https://quizlet.com/845961926/carnivora-common-latin-names-flash-cards/?i=rccit&x=1qqt