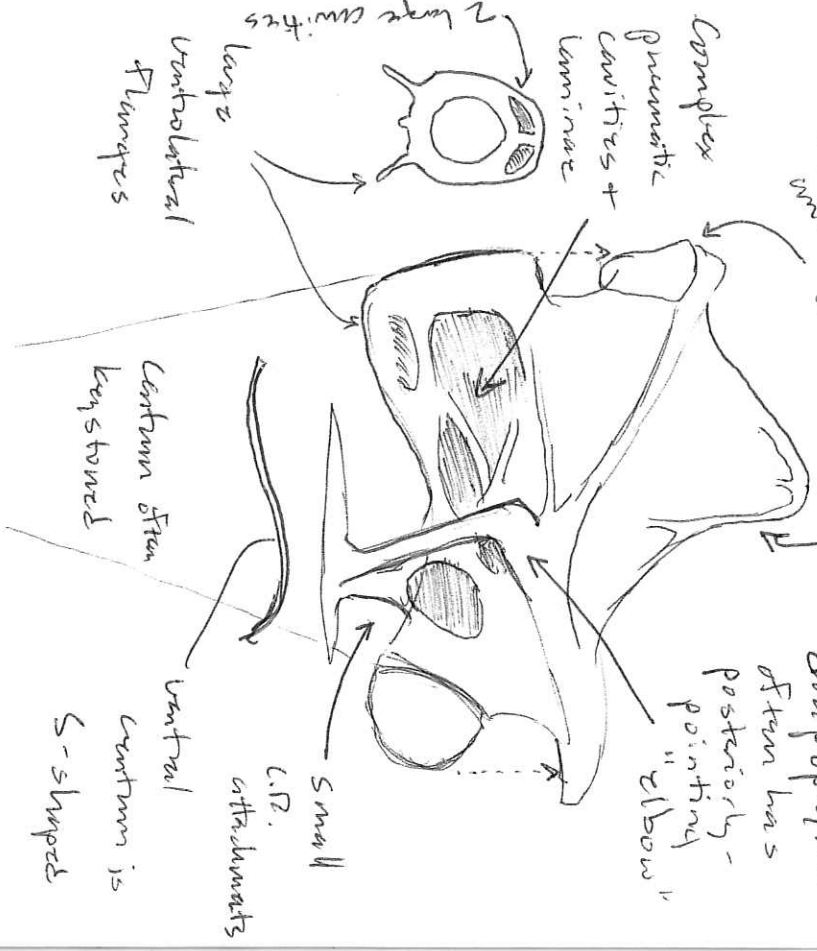


# Diplodocus

- Cervical count is 15

Postzyg is set up high, with 1st vert with them and taller than wide

Neural spine is tall (more than 1 centrum diameter) and front edge is nearly vertical

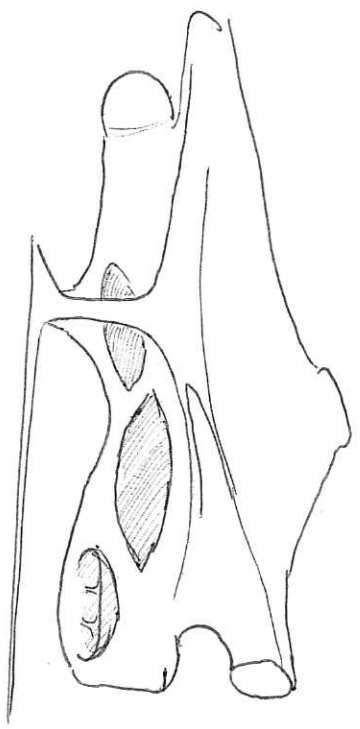


- Prezyg and postzyg even w/ centrum ends

- neural spine divided after C4 or C5

- E1 usually 3.5-4.5

# Barysaurus



★ Need to do a fig just of pneu coats



□ check ACDLs in Apato, Diplo, Barys

□ check n.s. bifurcation

Barossa's

not divided in C1-C8

- Cervical count 16
- E1 usually ST

- processes may overhang condyle, but postzygals not set forward

PCDLs often paired and short

low neural spine, usually not taller than I centrum diameter

"C"-shaped pedicles

diapophysis usually has "elbow"

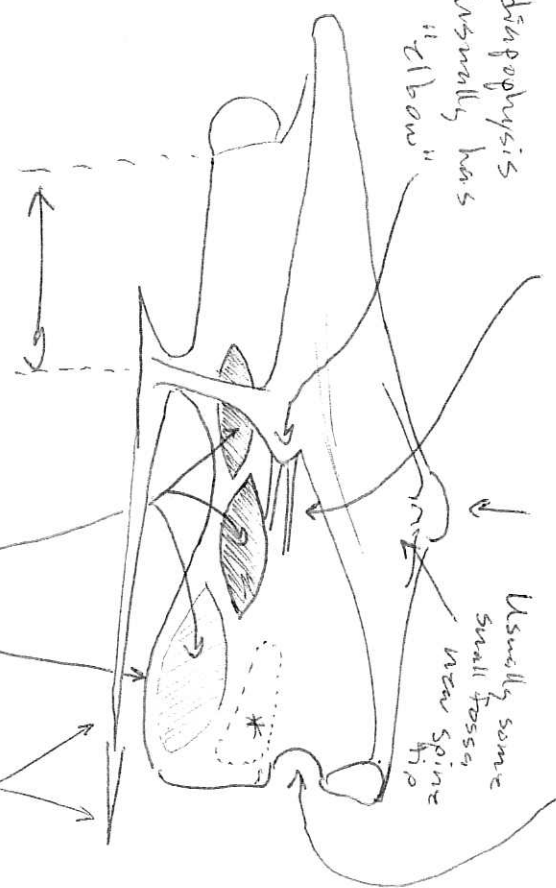
Usually some small fossa near spine

Cervical rib attachments small and set very far back from condyle

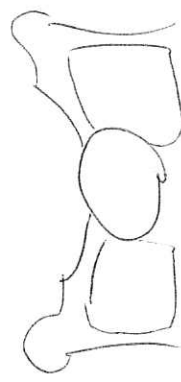
Usually 3 pneumatic fossae or foramina

\* Upper portion of centrum usually has no pneumatic features

VERY large scapulothoracic flange lateral sides may have a pneumatic fossa, a foramen or nothing



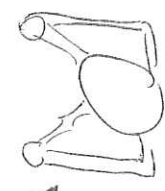
Aperte



Digive



short S



Not too far from different

Broad



long S



far from

Broad



concave



ADD NEURAL SPINES

Lean



short



angle down more

Hydro



shallow



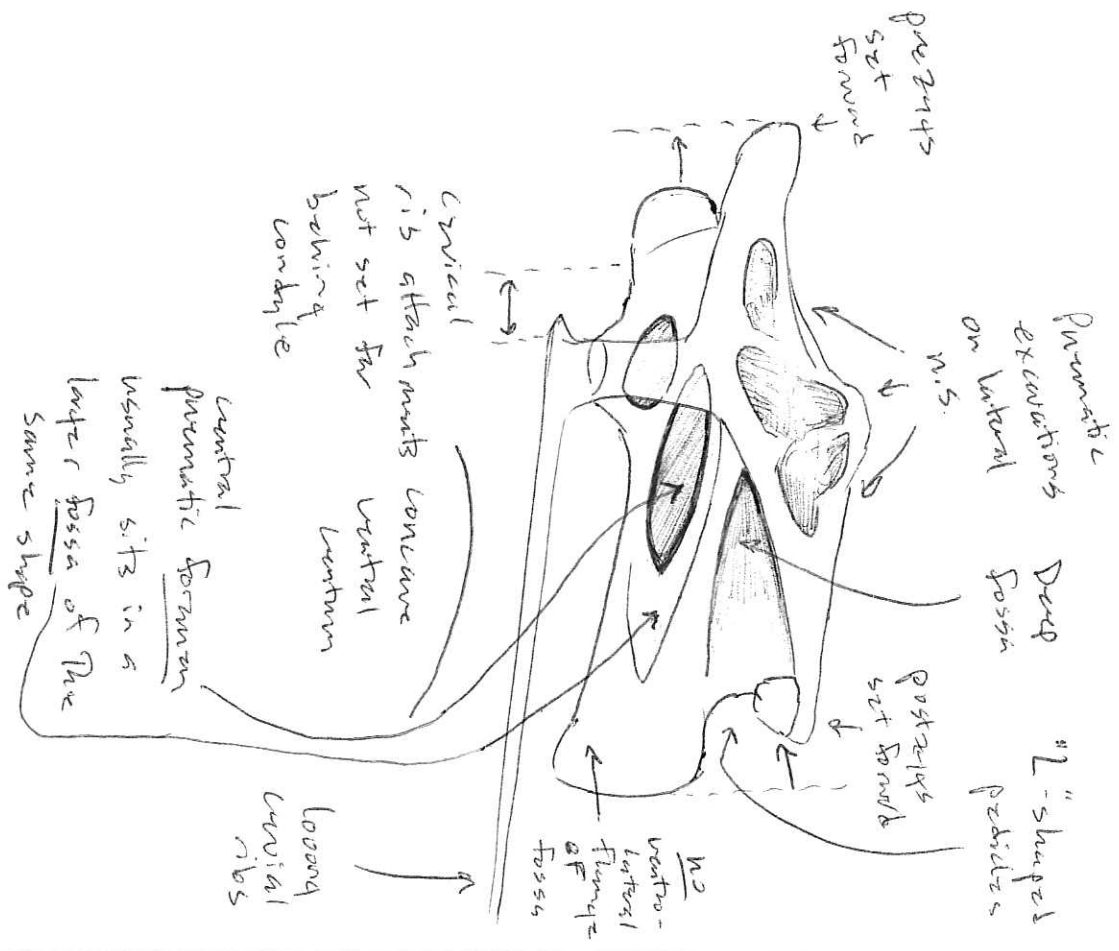
(NOT AS WIDE)

Standardize to centrum diameter

neural horns, condyles

Brachiosaurus

- Cervical count 13
- C1 usually 4-5
- Neural spine never bifurcated
- low in front half of neck, high in back half



Apatosaurus

- cervical count 13
- C1 usually 3-4
- neural spines bifurcated after C9-C5
- postzygals usually tall + rectangular
- short spines forms



massive parapophyses + cervical ribs, cervical ribs always shorter than centers

- centrum straighter and less waisted than in Diplod

Limnodynastes

- cervical count: 12
- C1 usually 3-4
- neural spines bifid after C5 or C6
- prezygs + postzygs well
- hdp set forward



no trace of ventrolateral flanges or fossae

- long cervical ribs

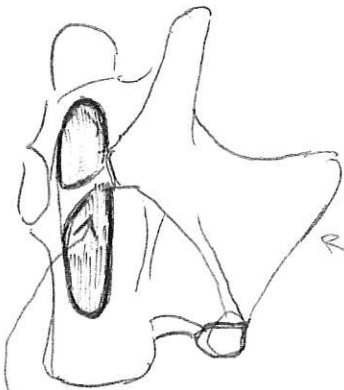
lateral ventral laminae  
often nearly horizontal

Distinguish from Apoda

- by:
- postzygs set forward
- massive paras.
- long ribs
- no ventrolateral flanges or fossae

Hoplomeniscus

- cervical count 12 or 13
- C1 usually 2-3
- neural spines near bifid



incompletely divided fossae

- relatively straight centra
- no ventrolateral flanges or fossae