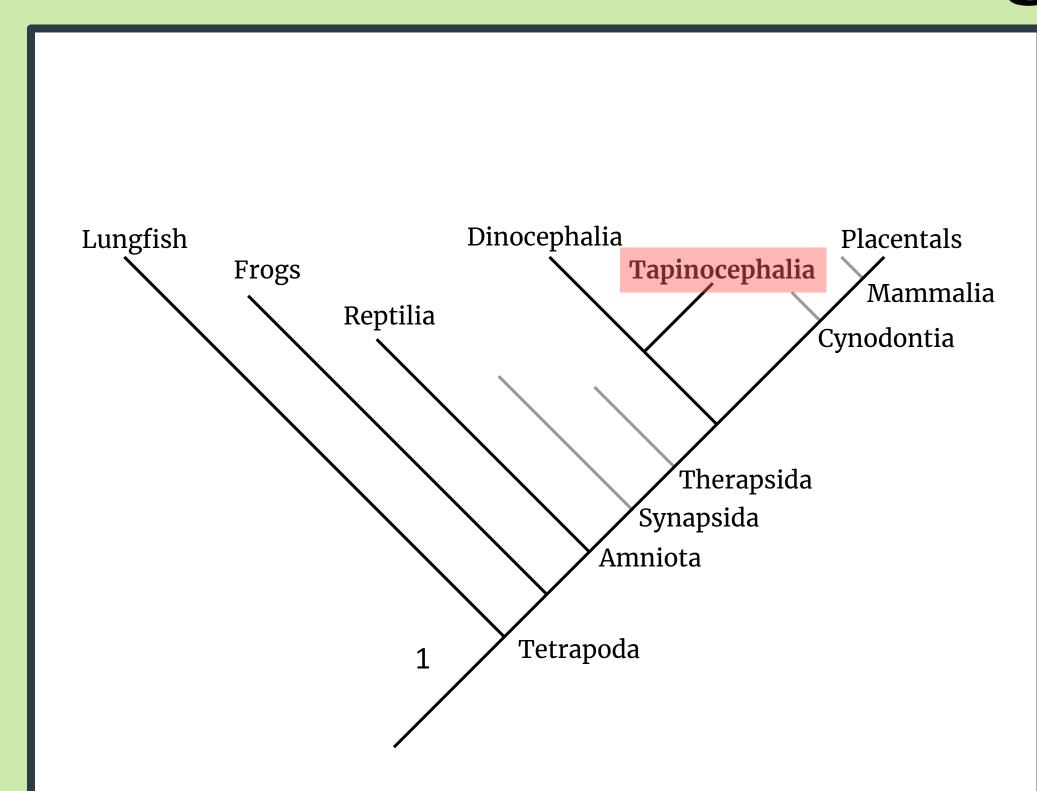
Tapinocephalia:

A group of Herbivorous Therapsids

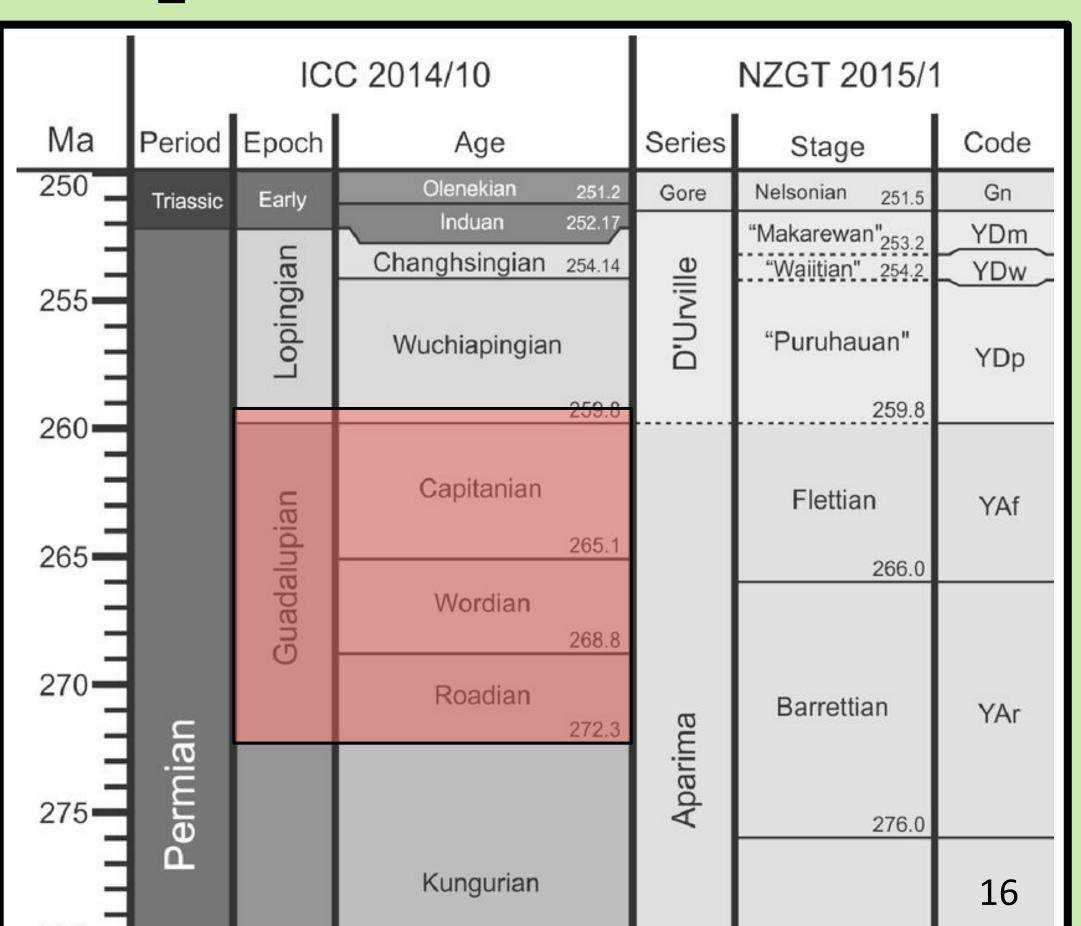
Rebecca Romelfanger, Cassidie Stevens, Ng Yi Yang

GEOL 204 The Fossil Record

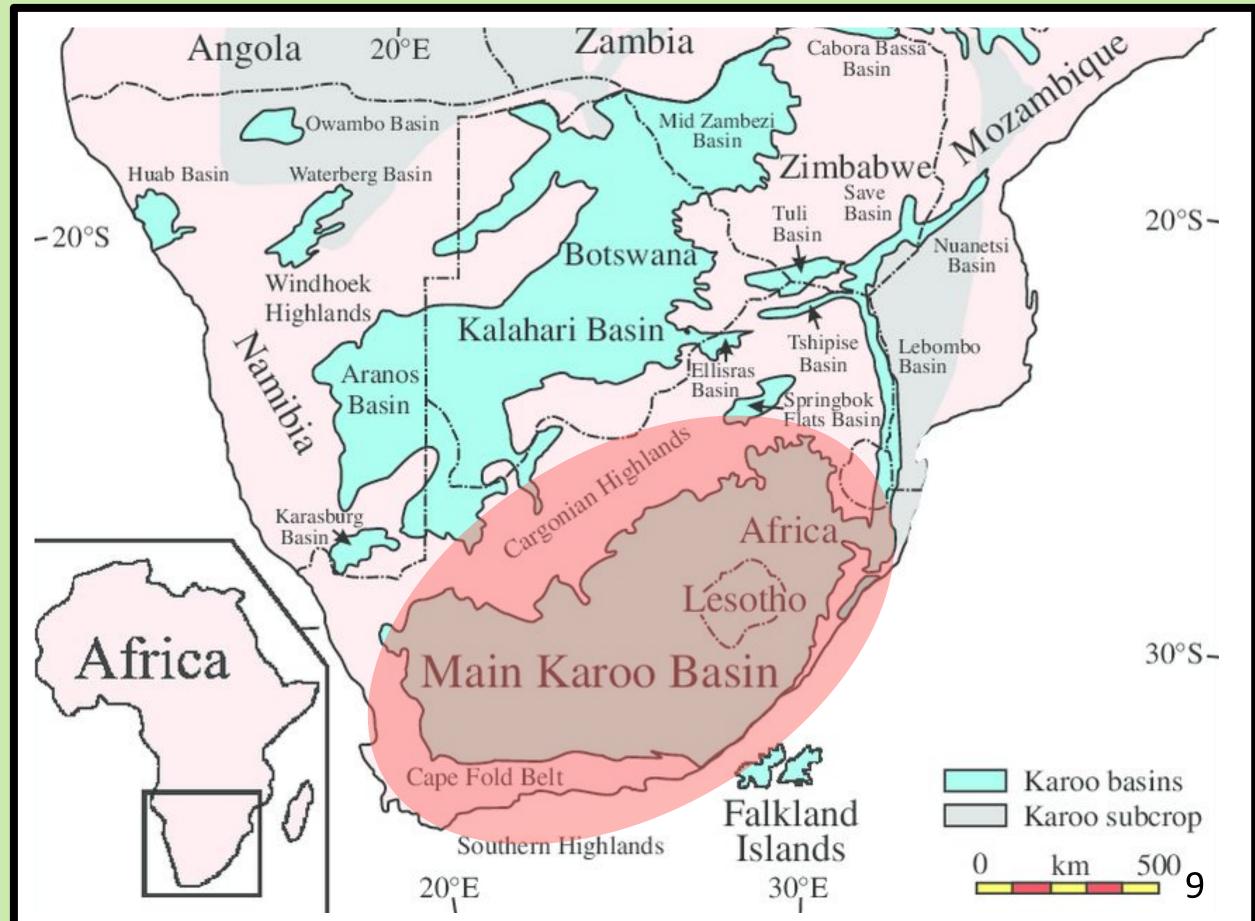
Spring 2019 Section 0101



Introduction: Tapinocephalia is one of the major groups of herbivores of the therapsids. There are three sub groups: Tapinocephalidae,
Titanosuchidae,Styracocephalus.

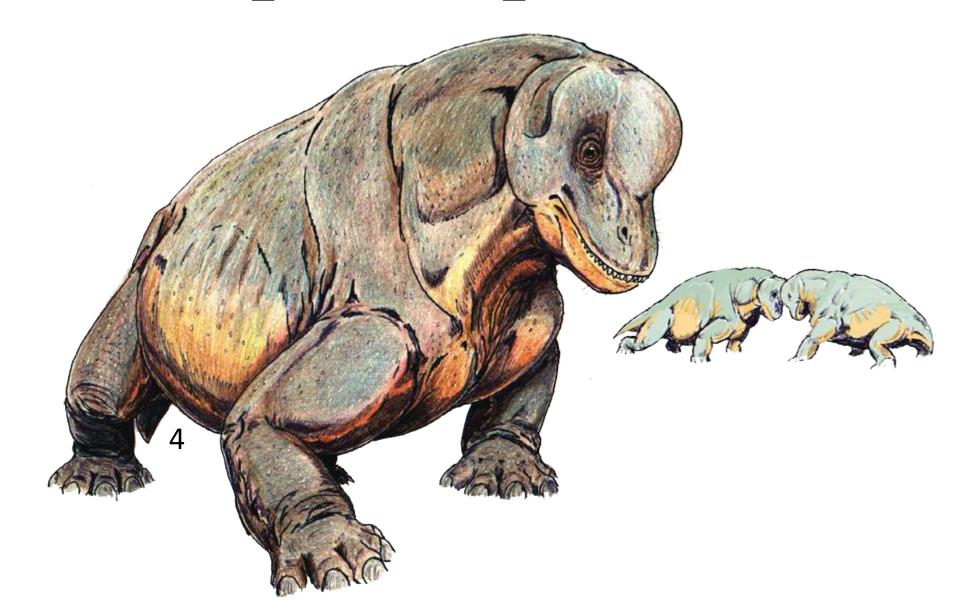


Geologic Range of Tapinocephalias was the Middle Permian to Late Permian period (Guadalupian Epoch)⁷



Most species in the group of Tapinocephalia can **geographically** be found mostly in the Karoo Basin ¹⁵, but some have been found in various locations around the world. ¹²

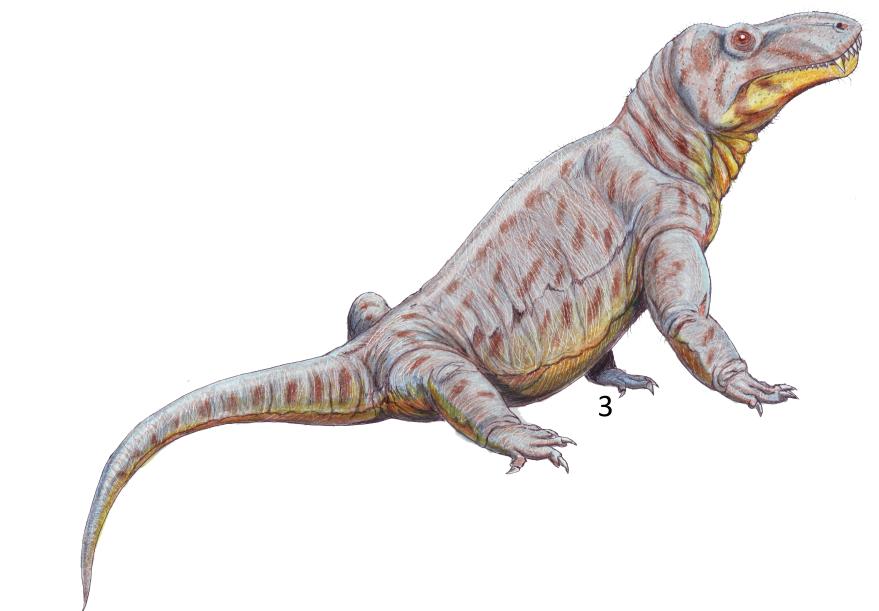
Tapinocephalidae



Distinctive Traits:

- Giant Herbivores (4-5m) with barrel shaped bodies
- Some species were the largest terrestrial animals during the Permian ⁵
- 500-1000kg ¹³
- Top of the skull was elevated in a dome like fashion, extensive cranial pachyostosis ⁶
- Moschops, a species of Tapinocehalidae, are known for head-butting²
- Found also in: Southern Tanzania ¹⁹, Southern Zambia ¹⁸, Russia (Tarstan) ¹³, South America ¹¹, and Brazil ⁶

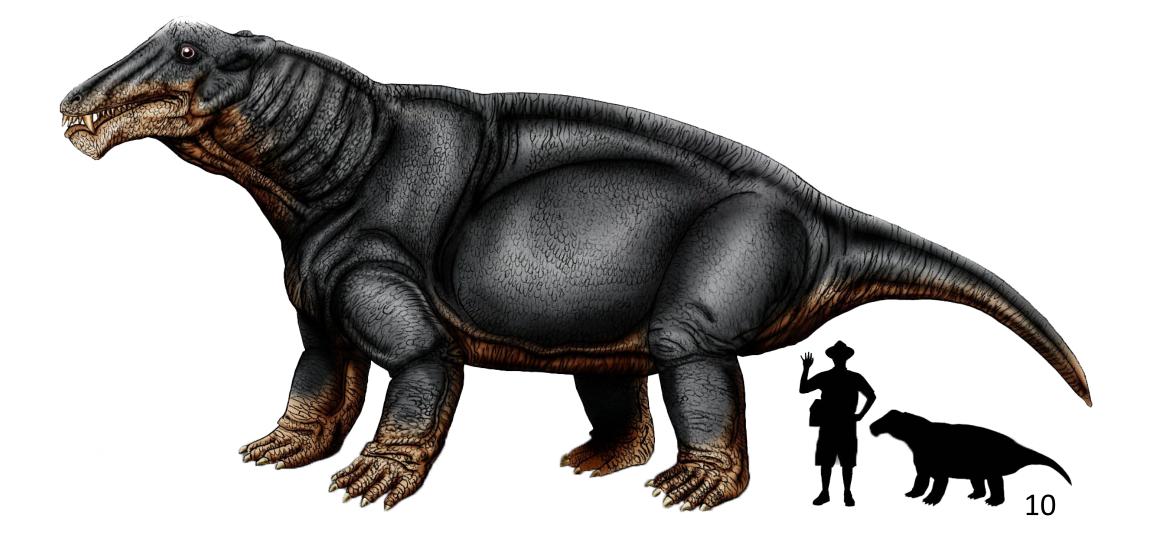
Titanosuchidae



Distinctive Traits:

- Opportunistic omnivore
- Fed on mainly vegetation ¹⁴
- 3-5m long
- Stout legs
- Sharp incisors and large canines
- Many small postcanine teeth ⁵
- Elongated, spoon-shaped snout
- Found also in: South America ¹¹, South Africa

Styracocephalus



Distinctive Traits:

- Only contains Styracocephalus platyrhynchus 17
- Cranial Ornaments
 - Frontal and Supraorbital bosses
 - Squamosal Flanges
 - Backward-pointing horns
- Found only in the Tapinocephalus Assemblage Zone of South Africa