

Sebecidae, The King Crocs of the Cenozoic



Basic Ecology

Sebecidae were carnivorous terrestrial vertebrates from the Cenozoic (Paleocene through the beginning of the Miocene). They stayed on land, unlike crocodyliformes today, which are mainly semi-aquatic. They lived in dry and warm climates in South America and are known to have been top predators. They had serrated teeth, which helped with chewing the meat of their mostly mammal diet.

Geography

- Background: The fossils of the crocodylomorpha fauna, from the Cenozoic, is overall very diverse and includes Sebecidae in it's ranks. Sebecidae like the other "crocs" found in this fauna, fossils can be found in South America mainly.
- In Depth: It is speculated, through new fossil evidence, Sebecidae inhabited the South American continent during the Cretaceous-Paleogene era, including the infamous extinction, and even survived through it. That is still a speculation however it is known Sebicicdae lived in the Eocene to the Miocene. Sebecidae fossils were found in South America, similar to the other crocodylomorphs. Since Sebecidae was living in South America during the Eocene and ending around the Miocene, they were used to a mainly hot climate. This is because they were living during the Paleocene–Eocene Thermal Maximum. The Miocene did see a long cool drier period.



Geological Range

- First appeared between 66-61.6 Ma during the Paleocene and quickally became diverse and abundant
- Last recorded appearance was between 13.8-11.6 Ma during the Miocene

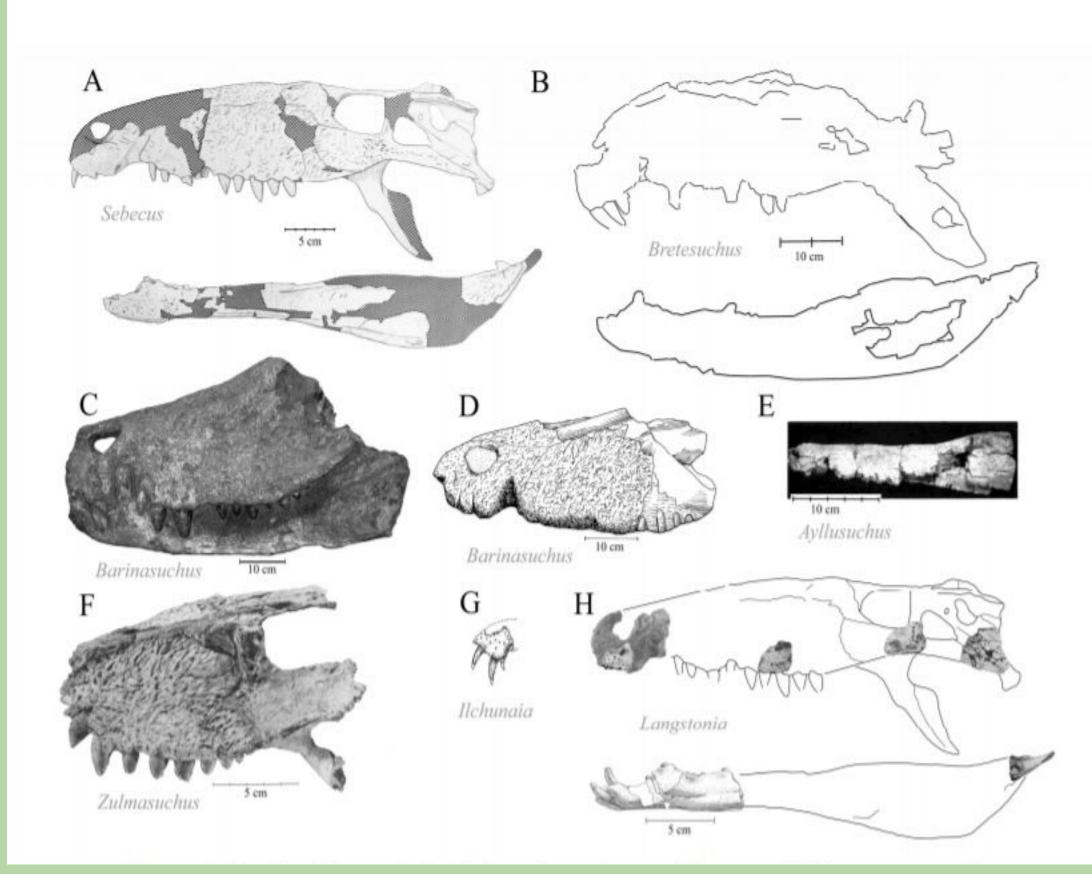
Distinctive Features

- Carnivorous and terrestrial sebecosuchian crocodylomorphs
- Diverse characteristics; overlaps heavily with close relative, Baurusuchidae
 - As of now, there is no clear division between Sebecidae and Baurusuchidae

Some characteristics of known members of Sebecidae:

- Nares that opens at the tip of
- the snout, which is laterally compressed
- Eye sockets open laterally
- Prominent fourth trochanter
- Laterally compressed, pointed and serrated teeth
- Very bent pterygoid bone
- Long, high, narrow rostrum

Comparison of the crania of Cenozoic South American sebecosuchian crocodyliforms



Molnar, R. E. (2010). A new reconstruction of the skull of Sebecus icaeorhinus (Crocodyliformes: Sebecosuchia) from the Eocene of Argentina. Brazilian Geographical Journal: Geosciences and Humanities Research Medium, 1(2), 314-330.

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