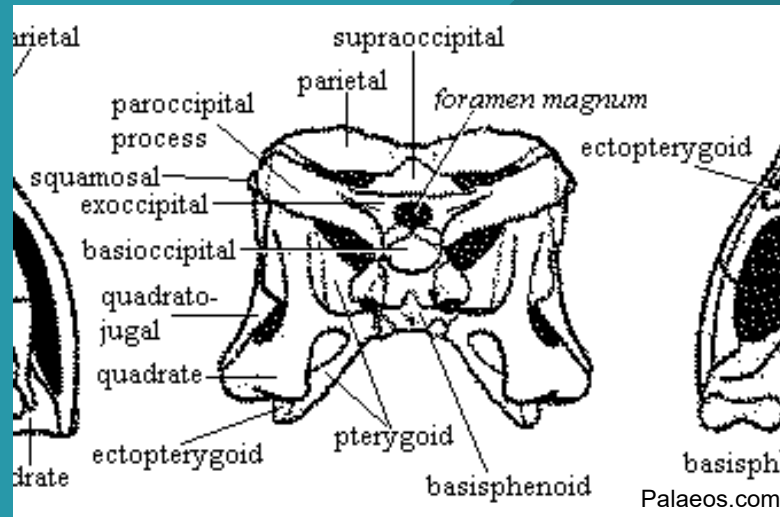


# ARTIFACT OF THE MONTH

February 2023

More often than not, when people think of the American Alligator (*Alligator mississippiensis*) they think of the reptile's teeth and the armor-like scutes that are found on the top of its body. For the most part, the archaeology crew usually only finds those elements and sometimes some of the vertebrae. Excitingly enough, this month's artifact features a new Alligator bone that we have yet to see in the Collections space. The exoccipital bone (right middle, bottom in red circle) sits at the back of the Alligator's head (bottom). It connects with a bone called the basioccipital and helps form the canal through which the alligator's spinal cord connects to its brain.

The exoccipital bone is seen as far back in the evolutionary record as Archosaurs which end up being split into two clades; Ornithosuchia for reptiles that are more closely related to birds and dinosaurs and Pseudosuchia the clade which is made up of reptiles that are closely related to crocodylians ([The Great Archosaur Lineage](#)). Evidence of the *Saurosuchus*, an Archosaur that lived during the Late Triassic period (251-201 mya\*) was found in South America in a geological formation that indicated it lived in areas where rivers were dominant and the rainfall was seasonal, which sounds pretty similar to the environment of Florida ([Dinoanimals.com](#)). As you can see in the diagram of the *Saurosuchus* at the top, the exoccipital bone is labeled ([Palaeos.com](#)).



The bottom picture is of one part of the Alligator skull the Collections team has in it's comparative collection. The collection is often used to assist the team in the identification of faunal remains and was vital in helping the team identify the exoccipital. Other species within the comparative collection are: rabbit, eastern diamondback rattlesnake, hog, raccoon, and fox. The team is always looking to add more! \*mya= millions of years ago

