

Decades after discovery, a proboscidean (elephant) partial skull in the collections of the Alf Museum is making its official debut to the scientific community, in an article appearing in the November 2011 issue of *Journal of Vertebrate Paleontology*.

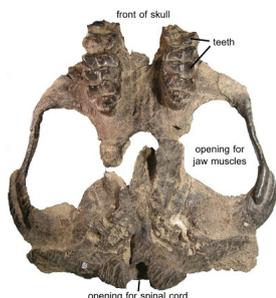
The fossil (illustrated below) belongs to an early mastodon called *Zygodon*, which lived around 15 million years ago in what is now the Mojave Desert near Barstow, California. This animal was much smaller than modern elephants, perhaps only one-quarter the body mass of an Asian elephant.

Zygodon

had a nearly worldwide distribution (found on every continent except Antarctica and Australia), but the fossil record from North America is relatively incomplete. Although teeth and a partial jaw were previously known from other locations within the United States and Canada, the Alf Museum specimen is the only relatively intact skull of the animal from this continent. This fossil provides important data on size and shape variation in

Zygodon

, which will be useful to future paleontologists trying to identify similar fossils, as well as information on the species' geographic distribution.



Proboscideans such as *Zygodon* originated in the Old World, and invaded North America around 15 million years ago. This was a time of great transition for western North America, with major changes in climate and vegetation as well as the animal life. Fossils from Barstow that are housed in the Alf Museum's collections and at other institutions preserve an important record of California's (and the world's) prehistory, and are critical for reconstructing past changes as well as understanding their implications for our modern world.

The Raymond M. Alf Museum of Paleontology is the only accredited natural history museum on a high school campus, and this project represents an ideal example of the long-term collaboration between the Alf Museum and The Webb Schools. The fossil was found in 1965 by

a Webb faculty member, Ken Monroe, and Webb students assisted in the collection and preparation of the specimen. As part of the museum's student research program, Webb student Raj Anand '10 studied the skull under the direction of Alf Museum director Dr. Don Lofgren. Many other students assisted in the preparation of the paper, from conservation of the specimen to photography.

The formal peer-reviewed publication on the *Zygodon* skull appears in the November 2011 issue of *Journal of Vertebrate Paleontology*, and the fossil is also on public display at the Alf Museum ([see here for museum hours](#)).

Lofgren, D. L., and R. S. Anand. 2011. Partial skull of *Zygodon* (Mammalia, Proboscidea) from the Barstow Formation of California. *Journal of Vertebrate Paleontology* 31:1392-1396. [[link to journal article](#)]