

OKLAHOMA ROCKS! Fossils Come Alive

LESSON #3



“*Saurophaganax Maximus*” (“Greatest King of the Reptile Eaters”). This Jurassic giant lived 150 million years ago. The living animal was about 40 feet in length, weighed about 4,000 pounds, and had a skull nearly 4 feet in length.

The *Saurophaganax* was a meat-eating predator likely capable

of bringing down prey equivalent to its own size or much larger. It was equipped with long arms and three-clawed hands that allowed it to grasp and hold its prey. The deadly claws of *Saurophaganax* were the largest of any meat-eating dinosaur. The only known skeletal remains of this meat eating (carnivorous) dinosaur were found between 1931 and 1938, in the same pit as the dinosaur *Apatosaurus* by a team of Works Progress Administration (WPA) workers. The workers were under the direction of University of Oklahoma paleontologist Dr. J. Willis Stovall, who served as director of the Stovall Museum from 1943-1953. Both skeletons, as well as the remains of other animals, were found in a single pit in Cimarron County within the Morrison Formation, of Jurassic age (150 million years ago), a world-famous dinosaur fossil-bearing strata which extends throughout much of Colorado, Wyoming, Utah, and into the Oklahoma Panhandle. A skeletal reconstruction of *Saurophaganax Maximus* can be viewed at the Sam Noble Museum of Natural History in Norman, Oklahoma.

My Pet Fossil Materials

- paper bowls or butter tubs
- plaster-of-Paris
- leaf, shell, bone, or other materials to turn into fossils
- petroleum jelly

Making a Fossil (Do in groups of three or four):

1. Prepare plaster-of-Paris so that it is smooth and thick.
2. Fill bowl or tub with plaster to a depth of about one inch.
3. Coat object to be fossilized (leaf, shell, bone, etc.) with a thin layer of petroleum jelly.
4. Press the object into the plaster, but do not allow the plaster to flow over the top of the object.
5. Allow the plaster to dry at least 24 hours and then remove the object.
6. Coat the top of the plaster with a thin layer of petroleum jelly.
7. Pour more plaster-of-Paris on top to a depth of about one inch and allow to dry for at least 24 hours.
8. Separate the two halves. The original half represents a mold fossil and the second plaster poured represents a cast fossil.