

### ***Is that a REAL dinosaur?***

One of the most frequently asked questions about dinosaurs in museums is "Is that dinosaur real?" If the dinosaur is real, it means that the dinosaur remains have been naturally altered and have become fossils. However, it is not possible to stock every museum with actual dinosaur fossils.

#### ***If it is not real, what is it?***

The answer is a cast. Fossil casts are made for many reasons. One reason is because it is not possible for everyone to travel to the museum which houses the "real deal." Traveling exhibits which bring large dinosaurs to local museums are more than likely casts. The actual fossils are too fragile and too expensive to move from city to city.

#### ***How is a cast made?***

Casts are made from materials such as rubber or silicone. To create the cast, a two-step process is completed. First, the mold is made. Although every paleontologist has their own way of doing this, the outcome is a case that surrounds the actual fossil. Finally, the casting material is poured into the mold, enveloping the fossil. When hardened, the mold is pulled away from the fossil, revealing a replica so exact, microscopic details can be captured.

#### ***Cast-Detecting Techniques***

Now that you know what a cast is, here are a few hints on how to figure out what you are looking at. When fossils are "mounted," or put together and placed on display, they are made to look as if they are in motion. In order to do this, steel rods are used to position the fossil. Do you see a lot of metal on the outside of the fossil? The real fossil will have large steel rods on the outside, supporting the heaviest parts of the body, such as the head, hips, and tail. The cast will have the rods inside the bones, with only a few small pieces visible to attach the cast to a platform.

What is the color and texture of the fossil? The minerals that create an actual fossil can make it anything from black to dark red. The texture of a dinosaur fossil is much the same as a bone from your chicken dinner. It will be rough and jagged in some places. If it looks smooth and has a nice, glossy finish, chances are that it is a cast.

So now you know! Casts and actual fossils are both important and unique. They each offer a glimpse into the history of the world.