

How to Become a Dinosaur Mummy in 9 Easy Steps ...and only 77 Million Years

You are about to read the story of my very unfortunate cousin Delbert. He made a rather big mistake and tried to eat a small titanosaur. What Delbert didn't see was a quite large titanosaur standing nearby. One swipe of a huge tail and... well, let's just say it was over quickly for poor Delbert. As you might have Gussed, we dinosaurs are not very sentimental. No one went to collect Delbert and so a very curious thing happened to his body. It became a mummy.

Now, even though I consider myself one of the more intelligent members of my family, I am not certain just how this mummification thing happened. I am hoping you will read the story that the nice people at the museum have written and explain it to me!



If you are a fan of dinosaurs or other prehistoric creatures, you have probably seen fossils. You may have been lucky enough to see them in a museum, or you may have seen pictures of fossils in books or on the internet. If you have touched a fossil, you probably thought that it felt like stone. That's because most fossils are made up mostly of stone. But they weren't always that way.

First, let's talk about the different kinds of fossils. There are two main types of fossils. The first type is what is most common, a bone or other part of an animal or plant that has been "fossilized" and become mostly stone. The second type is called a trace fossil. One of the most common trace fossils are footprints. Fossil footprints are made when an animal, such as a dinosaur, steps in mud or clay and leaves behind a footprint "trace" of their having walked there.

The rarest fossil of all is when an entire animal is preserved. We aren't talking about just the bones, but everything – bones, skin and even guts. This has happened with some very small animals, such as prehistoric birds. And it has happened with some plants and insects. But only one fossil of a dinosaur has ever been found with his entire body covered with skin.

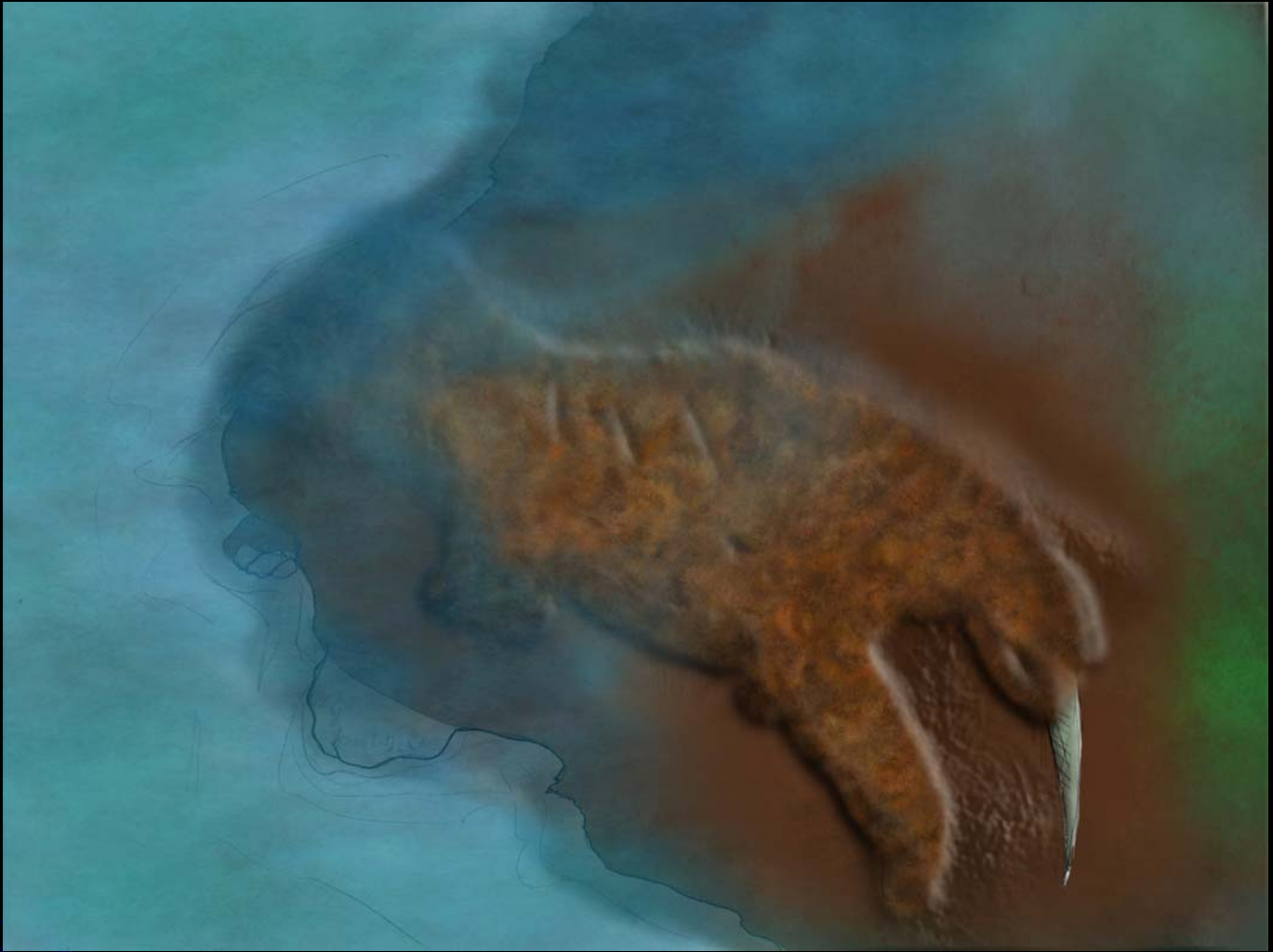


This is a photo of mummified and fossilized dinosaur skin.

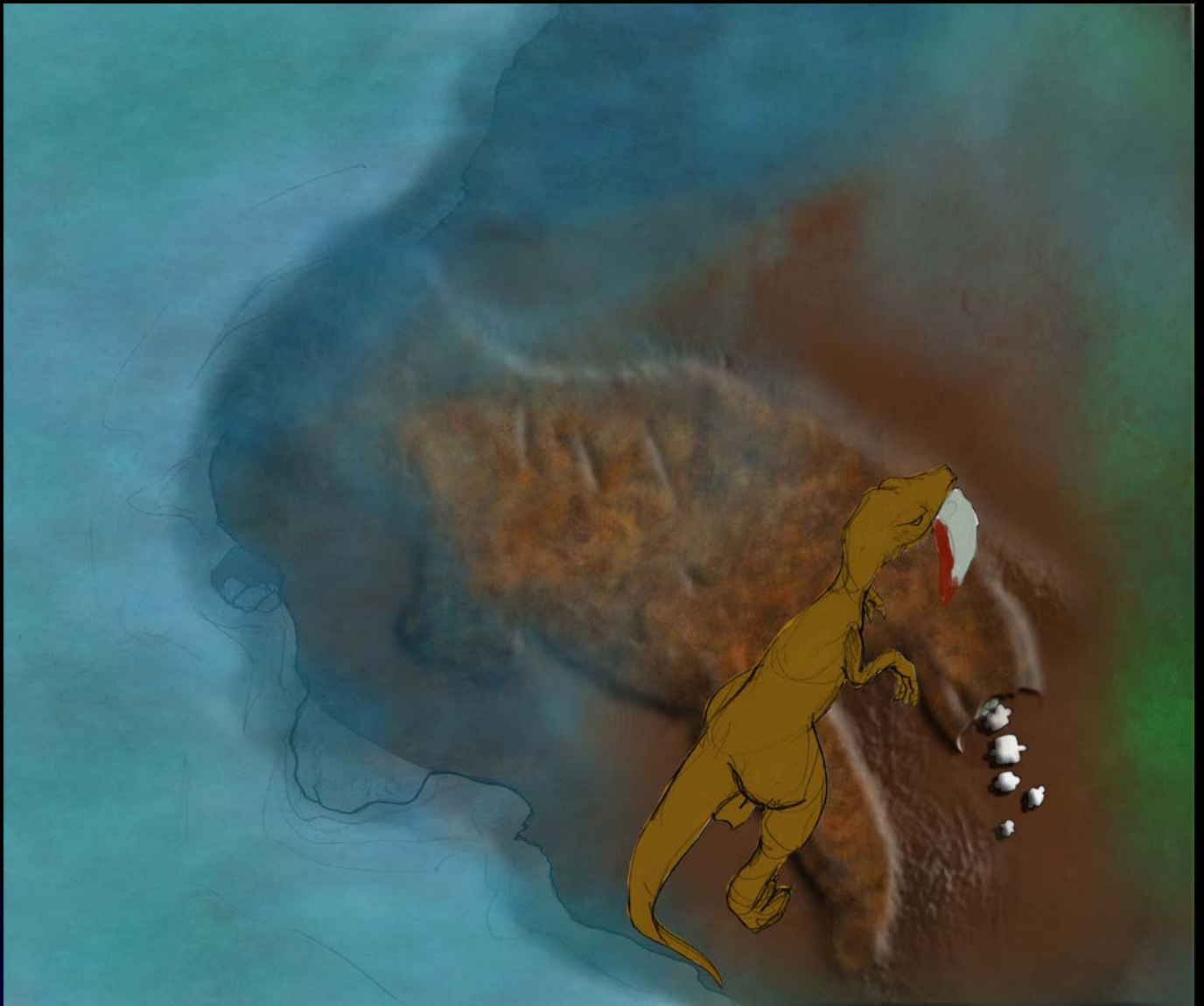
What we are going to do here is tell you how a dinosaur can become a dinosaur mummy. Actually, we are going to tell you the best idea that scientists have been able to come up with that explains how a dinosaur mummy can be created by nature.



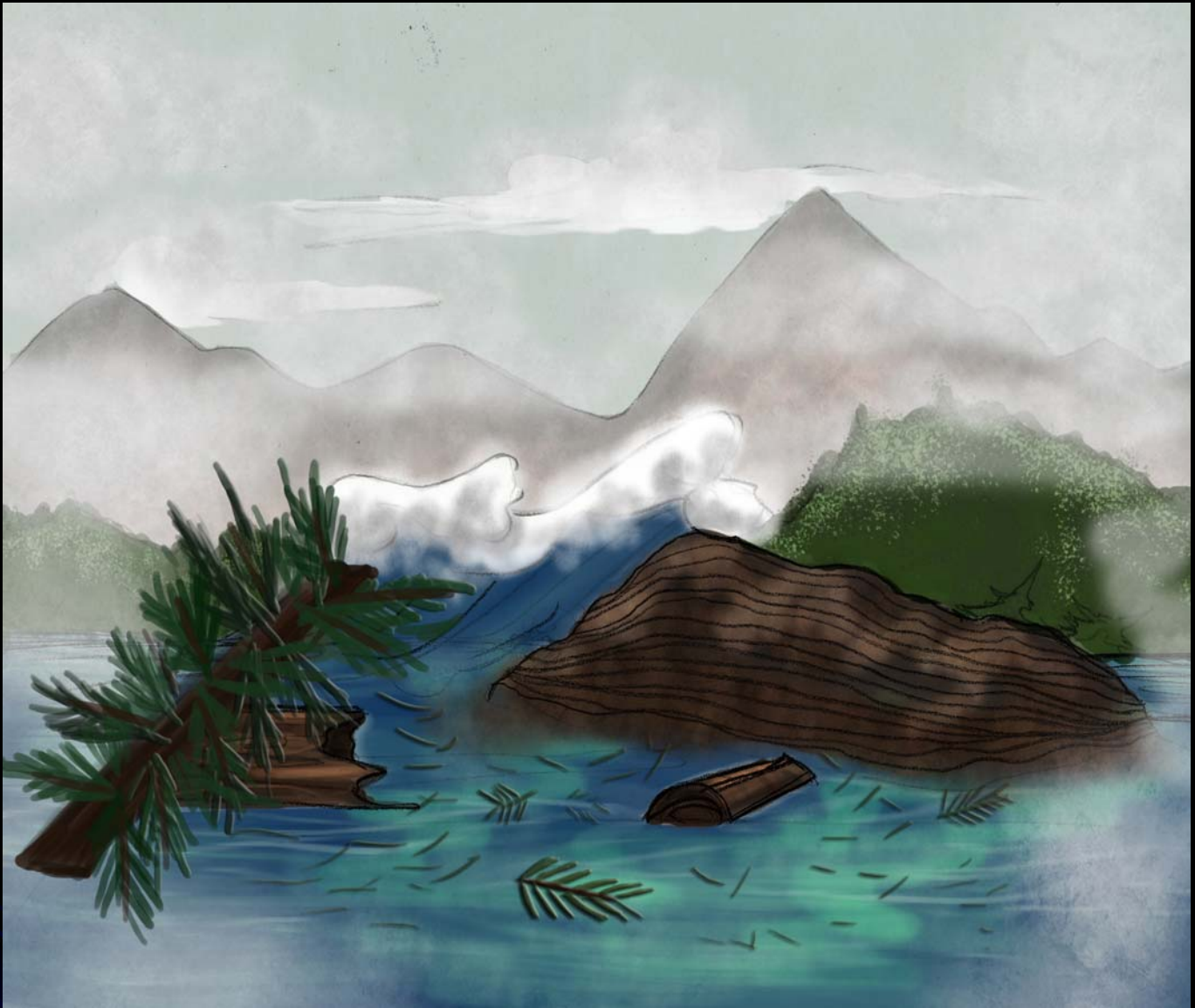
First, the dinosaur had to die. In this case, as Mac explained earlier, the dinosaur was struck by the tail of a titanosaur, a large sauropod. He died on the shore of a river. Within hours of his death, the water in the river began to rise from a storm. A hurricane was approaching the area and the rain from this storm was beginning to create flooding. The river level rose and water began to cover his body.



In this picture you can see that the river didn't just cover Delbert's body with water. When a river floods, it carries soil, sand and clay with it. As the water flowed over the dead dinosaur, this muddy mixture covered the body. The only part of his body that remained uncovered was the end of his tail.



In nature, if there is a meal around, there is almost always something there to eat it. In this case, the tail of the dead dinosaur that wasn't covered with mud became a tasty treat for a passing carnivore. The water and mud that has covered the body is preventing oxygen from reaching the body. That slows down the decay that would normally occur.



This is where a series of events begin that are different from what would normally have happened to a dead dinosaur. The big storm continued to dump water into the river and the coastal plains. More mud covered the body, and the storm was so severe that trees were uprooted and clogged the river. All this happened just a couple days after Delbert died. This type of storm only happened every few hundred years and would have drowned many large animals, including the big dinosaurs.



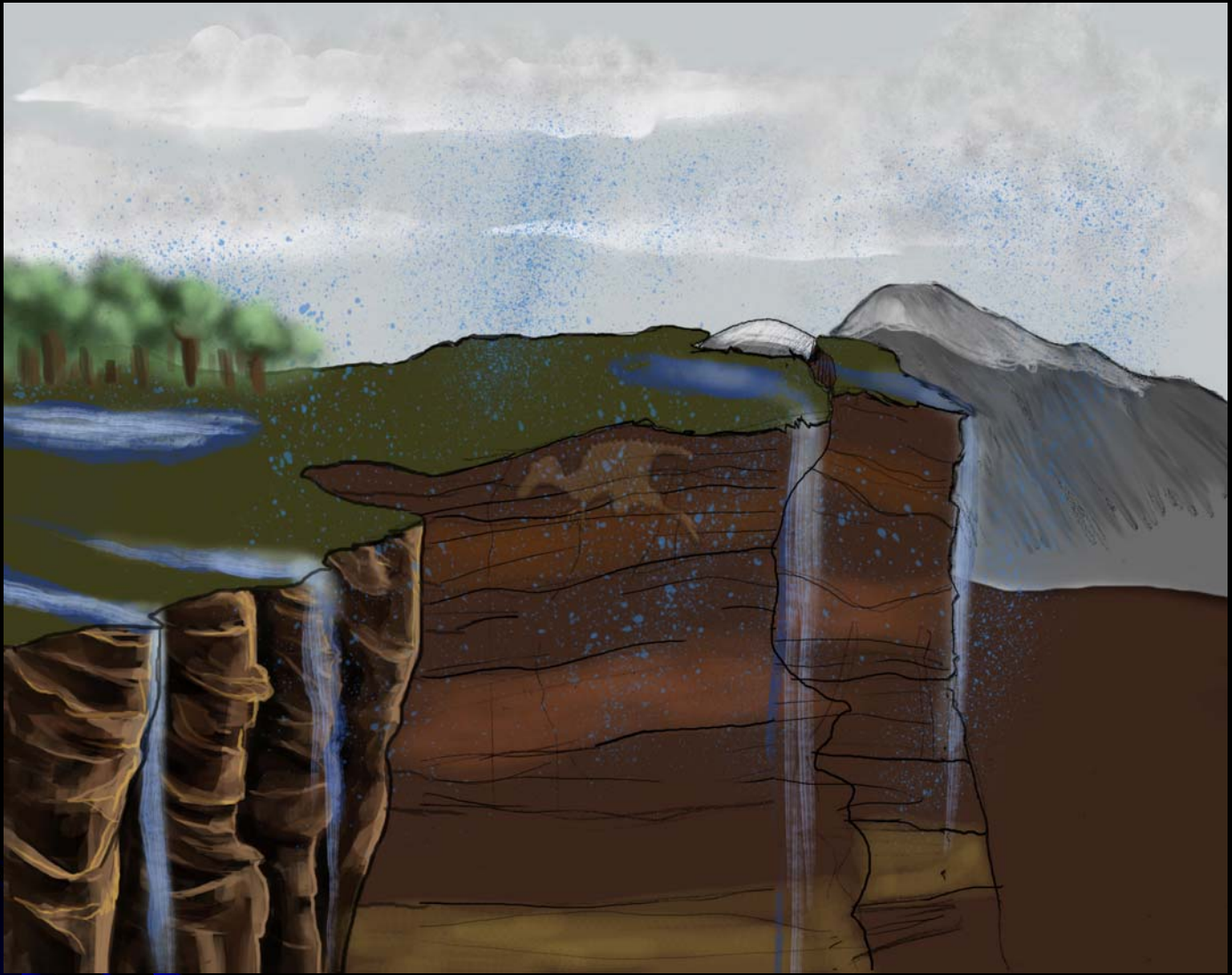
This is a sort of X-ray view of Delbert's body that was lying under the mud. You can see that he was already beginning to shrivel up as the moisture was leaving his carcass. However, something else was happening that was totally rare and unexpected. Some of the trees that were floating in the water that covered Delbert's muddy tomb were conifer trees. Conifer leaves contain a chemical called aldehyde. This chemical prevents decay in the tissues that make up an animal's skin and organs. In fact, it is the chemical that ancient Egyptians used to help preserve mummies. This chemical was slowly seeping into Delbert's body, preventing his flesh from rotting. This is how he was able to mummify.



Delbert has been dead for about 10 million years. An earthquake moved the layer of rock where he rests so that he is not on his side anymore. As you can see, using our X-ray vision, he is buried under many layers of rock and soil that were deposited by the river, then a lake that covered the area for a couple million years. Now, the dead dinosaur is up in a small mountain created by shifts in the Earth's crust. His body still has a lot of real bone in it as, for Delbert, fossilization is taking a long time.



This picture jumps about 30 million years ahead. The dinosaurs that walked are all gone, only those flying ones we call birds remain. Delbert's body is now completely fossilized. The river that buried him has been gone for millions of years after it deposited many layers of mud on top of him. Earthquakes have reshaped the landscape. We are still using our X-ray vision to see the fossilized mummy lying under layers of rock, just waiting.



Now it is only about 10,000 years ago. Wind, rain, glaciers and earthquakes have worn down and moved the landscape so that Delbert is getting very close to the surface. Every year a little bit of the rock and soil that covers him is eroding away.



Water that was falling over the cliff face where Delbert was buried has worn down the surface of the cliff so that Delbert's body is now mostly exposed. These two kids were part of a team of volunteer fossil hunters led by a scientist from their local museum. Fortunately, they found Delbert's fossilized mummy at just the right time. A few more years of erosion and this amazing fossil would have been lost forever, just a pile of crumbled rock. Instead, a team from their museum will carefully remove Delbert and put him on display.

What You Need To Know

1. Fossils of mummified animals are VERY rare.
2. It takes a series of events to create a fossil mummy that are almost impossible to have occur. That is why these fossils are so rare

