Digging up Dinosaurs

ALLI HEITZENRATER
H&SS editor• creative writing

What dinosaur comes to mind when you think about dinosaurs? Tyrannosaurus Rex? Maybe a brontosaurus? For many, more "common" dinosaurs come to mind. But what about the rest of the dinosaurs? The ones that many people don't know about?

photo: dailyfacts.org

The Afrovenator was a carnivore that could grow to be up to thirty feet long. Native to Africa, these carnivores had sixty or more razor sharp teeth that allowed them to violently tear the flesh of smaller dinosaurs.

The Carnotaurus had two horns coming out of its skull. They were sharp and could be used as a defense mechanism. Their eyes look forward as opposed to sideways. Because their eyeballs were so small, they had binocular vision and heightened depth perception.

A very ugly and bizarre dinosaur, the Epidendrosaurus, originated in China in the Late Jurassic Period. It had oversized hands, each with three digits.

The third digit on each hand was double the length of the other two. Paleontologists are unsure of its actual yet as of now, however, it is estimated that the Epidendrosaurus was about the size of a house sparrow (approximately 16 c.m. long).

A herbivore, the Erketu, meaning "The creator god," is native to Mongolia. Because of its appearance, it is often confused with a brontosaurus. The neck of the Erketu is 25 feet long, which is twice the size of its torso and tail.

The Mamenchisaurus has a thirty-six feet long neck, the longest neck of any known dinosaur. This is a Chinese dinosaur with spatula like teeth. Comparably speaking, the mamenchisaurus has a very tiny skull. When these dinosaurs died, their heads came apart very rapidly.

Each Nigersaurus had at least 500 teeth that are equivalent to the size of a human toddler's tooth. Although the dinosaur had so many teeth in its mouth, its bite was actually quite weak. The teeth were designed for a nip, as opposed to a chomping motion. It also had a paper thin skull, which studies prove contributed to its weak jaw muscles.

The dinosaur with the longest arm is the Paralititan. It has four arms that were each at least six feet tall. It was also roughly 98 feet long (the length of three double-decker buses!).

The Paralititan was native to Bahariya Oasis, Egypt. Despite this being an extraordinarily massive dinosaur, it was an herbivore and served as prey for carnivorous dinosaurs that also lived during the Late Cretacious Period, such as the Carcharodontosaurus.

The Spinosaurus was one of the most unique dinosaurs to have ever walked the planet. Standing off of its hips is a spine-like structure that rises two feet. Spinosauruses have snouts, much like a crocodiles. In fact, they were the only carnivore to have a snout and teeth like that. Spinosaurus means, "spiny lizard/thorn lizard."

Tojiangosaurus is a very intimidating dinosaur dating back 155 million years ago, to the Late Jurassic Period. It had a spiky tail, shoulder spikes, and back plates. Looking at this dinosaur, one would assume that it was a carnivore. In actuality, it was an herbivore and the spikes and plates served as defense mechanisms.

A Velociraptor was a very short, but quite fierce dinosaur. It is only 2.5 feet tall and 5.9 feet long. It is believed that Velociraptors were actually covered with feathers or fur. It has claws on either foot. The second of those claws were retractable. They were used to kill or attack prey.

Dinosaurs were a very fascinating species with many mysteries still yet to be discovered. For more information on dinosaurs,visit http://ngm.nationalgeographic.com/

Open House in Astronomy

Wednesday
Sept. 22, 2010
8:00pm
101 Otto
Behrend Science

Join Associate Professor of Physics and Astronomy Dr. Darren Williams for an open house lecture on our knowledge of Jupiter and what can be seen from small telescopes. Following the lecture, there will be a viewing of Jupiter and its moons at the Mehalso Observatory.

7 Facts about Hurricanes:

1. Hurricanes north of the equater spin counter clockwise while those to the south rotate clockwise.
2. **Hurricanes can have a diameter of around 500 miles.**
3. The center of a hurricane is called the eye.
4. **A Hurricanes eye can be 20 miles wide while the weather inside the eye is clear and calm.**
5. Hurricane Andrew was one of the most damaging hurricanes to strike North America in terms of property lost. It caused over 25 billion dollars worth of damage.
6. **Once a hurricane strikes land, it quickly looses energy as the warm waters it relies on are no longer available.**
7. The most deadly hurricane on Earth occurred in 1970 in Bangladesh. Over 1 million people perished, many because of the massive flooding the storm left.

Quote of the week:

"Science...never solves a problem without creating ten more."

-George Bernard Shaw

Two storms gaining strength in the Atlantic

RYAN GULA
Science editor• biology

Hurricanes are one of nature's most powerful forces. Every year many occur, laying down a path of destruction where they strike.

Although our knowledge of hurricanes is improving with more and more technology, they still remain very much unpredictable.

The national hurricane center located in Miami, Fl. tracks hurricanes in both the Atlantic and Pacific oceans.

Hurricanes that plague the eastern coast of the United States begin their formation near the equator. There, warm moist air rises off the surface of the ocean, creating an area of low pressure.

The area of low pressure receives a constant flow of air that moves into the area, warms, and then rises. This causes the surrounding air to begin circulating in a counter clockwise rotation.

As this process of warm air rising continues, the storm strengthens until it becomes a tropical storm. Tropical storms, although not as strong as a hurricane, are assigned names by The World Meteorological Organization. Names are assigned based on a predetermined list alphabetically as a storm occurs.

Hurricanes are ranked on their severity using a system of numbers one through five.

Category one hurricanes have wind speeds of 74 to 95 miles per hour. A category two storm has wind speeds of 96 to 110 MPH.

Major hurricanes, with wind speeds over 110 MPH are considered major.

A category five storm is the most severe and has wind speeds over 155 MPH and causes a storm surge over 19 feet.

The consequences of such a storm are catastrophic as massive flooding remains in the storms wake and most buildings are completely destroyed as result of the wind.

The number of storms that approach the United States from the Atlantic Ocean has increased over the past few years.

This year in particular, the Atlantic has had a total of six tropical depressions and five hurricanes for a total of 11 storms.

One reason that can explain this trend of increased storm activity is the warmer water temperatures and the calmer winds over the Atlantic, allowing for increased storm development and activity.

We are currently only half-way through hurricane season, which lasts from June 1st till November 30th, so there may be more storms to come.

Currently, there is one tropical storm approaching the coast of Mexico, and two major hurricanes farther out in the Atlantic. Karl, the storm approaching the Yucatan Peninsula, has wind speeds of 60 miles per hour and is expected to produce some damage along with possible flooding.

Igor, the category four storm is currently making its way toward Bermuda and is expected to make landfall there early Monday as a category three storm.

The final storm, Julia, is located farther east than Igor and is expected to move back into the Atlantic, steering clear of land. It is still unknown whether or not any of them will make landfall on the United States.

We'll continue to watch the Atlantic for more storms to appear in the Atlantic and Pacific Oceans, and keep you updated with the damage they inflict after landfall.

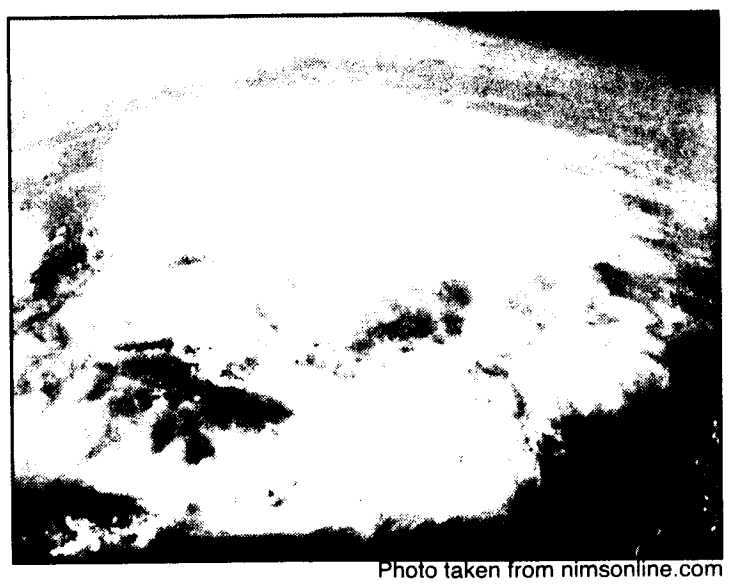

Photo taken from nimsonline.com

Science: *Launching students into new opportunities*

ELIZABETH MASTELLER
Science Writer• biology

Majoring in any science opens doors to many opportunities after graduation. Having a Bachelor of Science degree can be used for a broad range of different career pathways.

Here at Penn State there are many different routes you can take to obtain your Bachelor of Science Degree.

The range of choices that you have to get the B.S. may be surprising. You don't need to major in a traditional 'science' to earn your B.S.

This degree is available in the fields of Justice, Business, Economics, and Language. There is also the more traditional route of majoring in areas such as Biology, Mathematics, Physics, Psychology, or General Science.

Which one you choose really depends on what you like and what you hope to do with your degree.

A choice that many students make is to continue their schooling past their bachelor degree, which is required for many careers.

Choosing to major in Science is appealing to many because of the various challenges it presents to the student.

Majoring in a Science isn't an easy decision because classes are challenging and much is expected. Many find that this will make graduation all the more satisfying. Those looking at your degree, whether they're a potential employer or a counselor considering your application for additional schooling, understand what goes in to getting your degree and they respect that.

For example, I personally have been on the path of a science major since I began my college career here at Behrend. I started as a Biology major, but switched to Science, with the Life Science option.

It is very similar to Biology but I found I am able to make more decisions about what classes I take, allowing for me to minor in Spanish and International Studies.

Advisors are vital in helping to decide on the best path. It is much easier to talk to someone about the many options available at Behrend as opposed to maneuvering through the website and pamphlets alone.

Some career opportunities that are available to graduates with a B.S. are Nurses, Doctors, Biologists, Chemists, Forensic Scientists, Psychologists, Psychiatrists, Engineers, Academic Administrators, Criminologists, Computer Programmers, Lawyers, and Teachers. These are just some of the many careers that are looking for graduates with a B.S. or that may even require it.

The Sciences are a very important field and have led to many advances in our every day lives. Everything from understanding our planet to learning how to interact with others best can be related to science and it really just depends on what your passions and interests are. Science is the right choice for many students and leads to lots of successful careers.

Want to get a unique resume-builder?

To cover School of Science news for the Beacon, e-mail Ryan at:

rgg5029@ psu.edu

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