

MEET DINOSAURS **ALIVE!**

Here are the species of robotic dinosaurs that will be calling the Louisville Zoo home through September 2010.

Take a minute to meet these creatures never before seen at the Zoo.

Brachiosaurus [BRAK-ee-oh-SAWR-us]

Name means: "Arm Lizard"

When alive it measured: 89 tons, 85 feet long, 50 feet tall

Locomotion and Nutrition: Quadrupedal herbivore (walked on 4 feet and ate plants)

Time Period: Mid-Jurassic to Early Cretaceous

This giant was one of the largest creatures of its time. Rumored to be a distant cousin of the Loch Ness Monster, this creature also had a very long neck. Its name means "arm lizard" because its front legs were longer than its hind legs (*similar to a giraffe*). Small pointed teeth lined the jaws of this herbivorous (*plant eating*) sauropod. The two large nasal openings on the top of its head likely acted as a resonating chamber, used to make noise to communicate with others! Another possibility is that the nasal openings may have been lined with blood-rich skin to help keep the brain cool in hot weather. A tremendous heart with strong pumping power was needed in order to send the blood along the lengthy neck to the brain.



Cryolophosaurus [cry-o-LOF-o-SAWR-us]

Name means: "Cold-crested Lizard"

When alive it measured: 1,100 pounds, 20 feet long, 5 feet tall

Locomotion and Nutrition: Bipedal carnivore (walked on 2 feet and ate meat)

Time Period: Early Jurassic

Nicknamed "Elvisaurus," the Cryolophosaurus had a boney crest atop its head that resembled the hairdo made famous by Elvis Presley. In reality this dino got the name "cold-crested lizard" because it was found in Antarctica. The fan-like display on the skull was likely used to attract a mate because the crest was too fragile to be used as a defensive mechanism. Strictly carnivorous (*meat eating*), Cryolophosaurus would feast on the prosauropods, which were plant-eating dinosaurs. So far it is the only meat eater unearthed in Antarctica.

Deinonychus [die-NON-ih-kus]

Name means: "The Terrible Claw"

When alive it measured: 150 pounds, 10-13 feet long, 3 feet tall

Locomotion and Nutrition: Bipedal carnivore (walked on 2 feet and ate meat)

Time Period: Early Cretaceous

Deinonychus was a relative of the Velociraptor. In fact, it was the dinosaur that the Velociraptors in the movie "Jurassic Park" were modeled after since at that time no Velociraptor had yet been discovered that were as large as those portrayed in the movie. This slender dinosaur had three fingers on each hand that could grab prey. The curved finger claws allowed for a great attack, and the four-clawed toes made this dino a force to be reckoned with. The "Terrible Claw" was located on the second toe, measured five inches in length and was held retracted when the dinosaur was walking. When on the attack Deinonychus would balance its body weight on one foot, swinging the deadly second toe on the other foot, and then kick with the balancing foot. It would then use its 60 large jagged-sword teeth to tear the prey apart piece by piece. This dino had a large brain that allowed for highly-evolved coordination and made this attack strategy possible.



Dilophosaurus [Di-LOFE-ah-sawr-us]

Name means: "Double-Crested Lizard"

When alive it measured: 1,000 pounds, 20 feet long, 6 feet tall

Locomotion and Nutrition: Bipedal carnivore (walked on 2 feet and ate meat)

Time Period: Early Jurassic

The Dilophosaurus' skull featured a pair of crests that ascended backward into a fine point. Since only a certain number of Dilophosaurus had the crests, the theory is that they grew only on males and were used to attract females rather than for attacking or defense. Although they were clearly carnivorous, their thin teeth were not suitable for grabbing and killing prey. They used their claws and strong jaws to rip up their food before swallowing it. The teeth also indicate that their diet could have also included fish or amphibians.

Dimetrodon [di-MET-ro-DON]

Name means: "Finback"

When alive it measured: 550 pounds, 11.5 feet long, 3 feet tall

Locomotion and Nutrition: Quadripedal carnivore (walked on 4 feet and ate meat)

Time Period: Early Permian

The Dimetrodon was actually not a dinosaur, but a pelycosaur, a mammal-like reptile. The "Finback" was known for the sail-like feature located along the back of the body. The fin or sail housed blood vessels that would warm the blood and it send throughout the body to help keep the reptile warm. If the Dimetrodon became too hot, then the sail would be directed away from the sun and into the wind. This creature was a meat eating predator with sharp teeth and clawed feet.



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Euoplocephalus [yew-OP-lo-SEF-e-les]

Name means: "Well Armored Head"

When alive it measured: 2 tons, 18 feet long, 5 feet tall

Locomotion and Nutrition: Quadrupedal herbivore (walked on 4 feet and ate plants)

Time Period: Late Cretaceous

This armored "vehicle" of a dinosaur had heavy plates over the neck and extra protection for the shoulders and base of the tail. These dinosaurs were built like military tanks—even their eyelids had armor! There were spines on the side of the face for extra protection and the tip of their tail was a large ball of fused bone which would be used as a weapon and swung like a club from side to side with potentially lethal effects on an attacking predator. The underbelly was the only part of the body without any armor. A toothless, beak-like mouth was an indication that it was a plant-eater, eating any and all vegetation it could find.



Parasaurolophus [PAR-uh-saw-ROL-oh-fus]

Name means: "Beside Crested Lizard"

When alive it measured: 2 tons, 33 feet long, 8 feet tall

Locomotion and Nutrition: Bipedal and Quadrupedal herbivore (walked on 2 feet at times and 4 feet at other times and ate plants)

Time Period: Late Cretaceous

The Parasaurolophus was often referred to as a duck-billed dinosaur because of the shape of its mouth. A backward pointing hollow crest sat upon its head and measured up to 6 feet in length! The male and female had different sized crests. The crest was used to make sounds and possibly enhance the animal's sense of smell. Because the nasal passages ran the length of the crest, the animal's vocal calls would echo through the forest like a foghorn.

Stegosaurus [steg-uh-SAWR-us]

Name means: "Roof Lizard" or "Plated Lizard"

When alive it measured: 2 tons, 30 feet long, 5 feet tall

Locomotion and Nutrition: Quadrupedal herbivore (walked on 4 feet and ate plants)

Time Period: Late Jurassic

This dinosaur's lower back and tail had two pairs of vicious spikes that were about 3 feet long. Following along the head and half way down the tail were plates that measured almost 2 feet tall. The massive surface area of the Stegosaurus allowed heat to rapidly absorb when facing the sun. The plates also had a lot of blood running through them and may have played a roll in temperature regulation much like Dimetrodon's sail-like fin. The animal had a small head and brain. It also had a concentration of bundled nerves in its pelvic region often referred to as a second brain. The function of those bundled nerves is not yet known. This animal's front legs were shorter than its back legs and it could simultaneously lift both of its forelegs off the ground to feed off lower branches of trees. Like many other herbivores Stegosaurus would swallow stones in order to help grind down the tough plant material in the stomach. These stones are called gastroliths.



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Styracosaurus [stih-RAK-uh-SAWR-us]

Name means: "Spiked Lizard"

When alive it measured: Nearly 3 tons, 18 feet long, 17 feet tall

Locomotion and Nutrition: Quadrupedal herbivore (walked on 4 feet and ate plants)

Time Period: Late Cretaceous

This bulky dinosaur had a powerful body resembling a rhinoceros, but with smaller horns above the eyes. The horn above the snout pointed upward. The real show piece was the horned neck frill. This great boney crest was attached to the skull and pointed backwards of the body. Six horns spanned across the top and were probably used for intimidation. Styracosaurus had a beaked mouth with no teeth indicating that it was a herbivore.



Torosaurus [TORE-oh-SORE-us]

Name means: "Perforated Lizard"

When alive it measured: 4 tons, 25 feet long, 11 feet tall

Locomotion and Nutrition: Quadrupedal herbivore (walked on 4 feet and ate plants)

Time Period: Late Cretaceous

This dinosaur had one of the largest skulls of any land-living animal, spanning 8 feet in length! Two great horns emerged from the top and a shorter one near the snout. The sharp beak at the end of the snout could be used to bite off tough vegetation and assist with chewing.

Tyrannosaurus Rex [tie-RAN-oh-SAWR-us-rex]

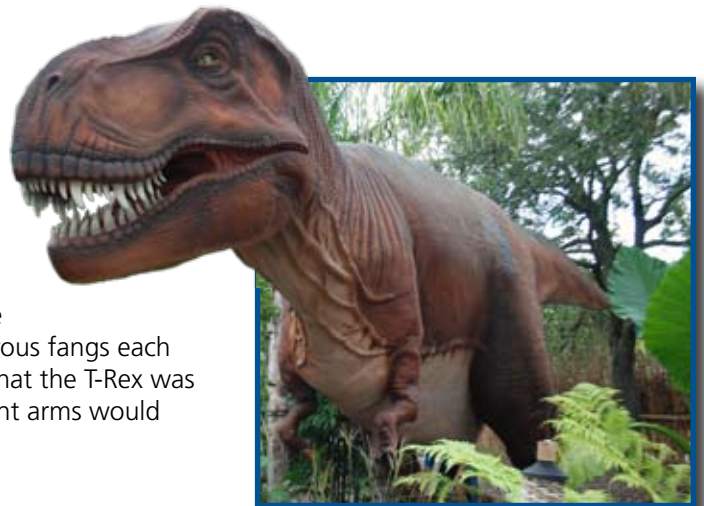
Name means: "Tyrant Lizard King"

When alive it measured: 8 tons, 39-49 feet long, 20 feet tall

Locomotion and Nutrition: Bipedal carnivore (walked on two feet and ate meat)

Time Period: Late Cretaceous

Described as "the most terrifying engine of destruction ever to walk to the Earth," this dinosaur is the largest terrestrial carnivore ever known. The Tyrannosaurus Rex's (T-Rex) head alone was 4 feet long and its extremely powerful jaws contained numerous fangs each measuring up to 6 inches in length! Most scientists now believe that the T-Rex was more of a scavenger than a hunter because the animal's short front arms would have been quite useless in capturing or holding prey.



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Dinosaurs Alive! will be at the Louisville Zoo through the end of September. A special attraction fee of \$5 applies for non-members in addition to regular Zoo admission and \$4 for Louisville Zoo members. Children age 2 and under are free. Groups of 15 or more may call (502) 238-5348 in advance for group discounts. For more information on the Louisville Zoo, visit www.louisvillezoo.org.

The Louisville Zoo, a non-profit organization and state zoo of Kentucky, is dedicated to bettering the bond between people and our planet by providing excellent care for animals, a great experience for visitors, and leadership in scientific research and conservation education. The Zoo is accredited by the American Association of Museums and by the Association of Zoos and Aquariums.