



FREQUENTLY ASKED QUESTIONS

How was the exhibit created?

The exhibit is the product of more than five years of work by renowned interactive designers, world-class paleontologists, and exhibit designers. It is the first of its kind in many ways. In fact, the simulation itself is the most complex and wide-ranging simulation of an extinct environment ever created!

Is the simulation a "simulator ride" (like the one in the RMSC's AdventureZone gallery)?

No, not at all. The simulation is a fully interactive experience where events will occur differently for each visitor. ***Be the Dinosaur™*** invites visitors to step into the twilight age of the dinosaurs, to formulate their own hypotheses about dinosaur behavior, and test them out.

Won't everyone just choose to be a T. rex?

No, visitors will enter the simulated world "blind" as to where in the Cretaceous they might end up, what type of creature they might be, and the goals it might have. When a visitor sits down at the pod controls, the scenario is chosen somewhat at random by the simulation software. Then, according to the dictates of the scenario, the animal types, motivating behaviors (hunger, nurturing young, etc.), animal populations and percentages are automatically chosen and each visitor is assigned to an appropriate dinosaur or ancient reptile. This prevents everyone from choosing to be a *T. rex* every time. And, if you don't know what animal you will be and what situation you might face, you're more likely to pay attention to all kinds of subject matter that could assist you. At the close of each individual simulation experience, a summary screen analyzes the visitor's performance and offers suggestions on where to look within the larger exhibit to improve and extend the next experience in the digital Cretaceous.

Exhibit elements always inform visitors as to what actual evidence the reconstructions are based upon, the scientific interpretation of the facts that governed the simulation scenario, and what other interpretations there might be. Of course, a different interpretation of those same facts might be presented in a subsequent simulation experience.

Won't visitors just go right to the simulator pods?

They may, but if so, their time on the simulator pods will be short. The exhibit is designed such that time spent in the more traditional sections of the exhibit is necessary in order to make the most of your simulation experience. Visitors who gloss over the traditional elements will quickly realize where in the exhibit they will need to spend time in order to maximize their subsequent experiences.

What if visitors choose to try behavior that was not appropriate for a particular dinosaur species?

The simulation is designed to be very accurate. Just as in life, species-inappropriate behavior is discouraged by the ecosystem. A visitor attempting inappropriate behavior will find that it isn't much fun, and their trips inside the virtual Cretaceous will be very short. The fun of the experience comes directly from learning and demonstrating knowledge of the subject matter while interacting with the simulation.

Is it possible for dinosaurs that did not coexist in real life to meet in the simulation?

No. Only those animals and plants that are believed to have lived at the same time in the same place will be present in simulation scenarios.

What are the scenarios based on?

The simulation is based directly on fossil evidence from the Hell Creek formation in the American Northwest. For example:

Say a fossil *T. rex* skull has been discovered with the tooth of another *T. rex* lodged within it, and the skull shows signs of healing. From this single piece of fossil evidence a number of different interaction possibilities have been created:

- The first is to face off against another *T. rex* in a struggle for dominance in a pack of communal animals, being careful not to truly damage yourself or your opponent and thus weaken the hunting pack.
- Another could be that two or more scavenging tyrannosaurs meet over a carcass and battle for the right to feed.
- A third would have two solitary hunters engaged in a territorial dispute.

As you can see, from this one piece of fossil evidence we can derive scenarios that represent the hypothesis that tyrannosaurs may have been social animals, possibly even living in packs, or the converse—that they may have been solitary animals.

You will see these interactions occur in the simulation. It is designed with unprecedented flexibility, and the artificially intelligent animals will, quite literally, act as animals in a zoo or nature preserve. The design allows for nearly infinite exploration by following one of the latest trends in interactive design—creating a virtual "sandbox" where users can explore and pace their experience according to their own interests.

Are there more creatures in addition to *Tyrannosaurus rex* and *Triceratops*?

Yes, but the focus is limited to *T. rex* and *Triceratops* for both scientific and educational reasons.

- Scientifically, ceratopsians like *Triceratops horridus* and *T. prorsus* made up over 60% of all the animals in the ecosystem. *Tyrannosaurus rex* made up about 4% to 16%. Hadrosaurs like *Edmontosaurus*, the other major species in the **Be the Dinosaur™** simulation, made up approximately 20% of the population [White, Fastovsky and Sheehan (1998), Russell and Manabe (2002)]. Other dinosaurs are known from sparse fossil evidence (only isolated teeth). The **Be the Dinosaur™** simulation therefore includes over 90% of the dinosaurs present in this ancient ecosystem.
- Educationally, the exhibit focuses on the two dinosaurs to allow visitors to experience each animal multiple times and have the opportunity to try different behaviors and compare and contrast these behaviors.

In addition to dinosaurs, the **Be the Dinosaur™** simulation contains the ancient flying reptiles known as pterosaurs, insects, mammals scurrying through trees and brush, fish, amphibians such as turtles, and more.