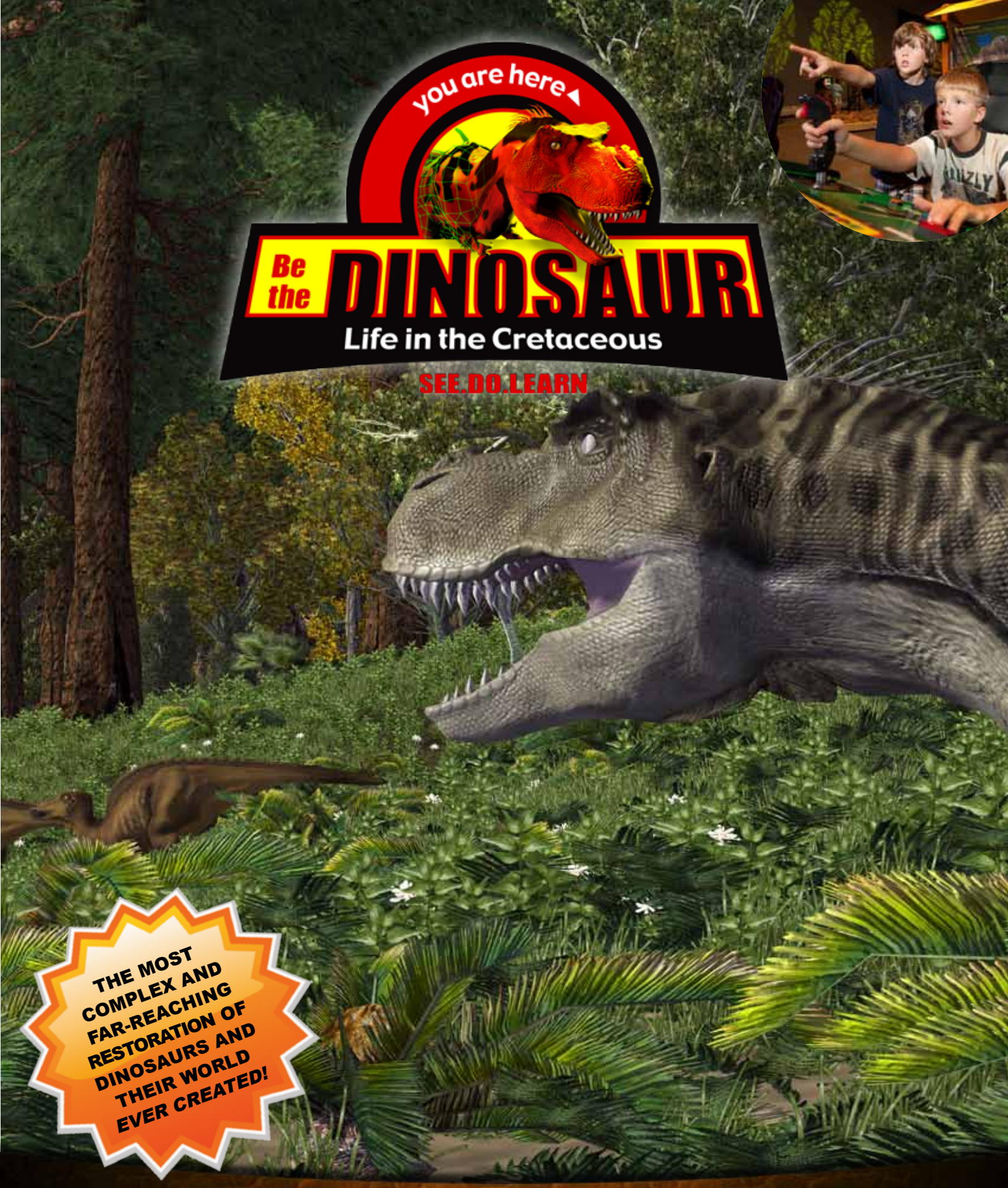
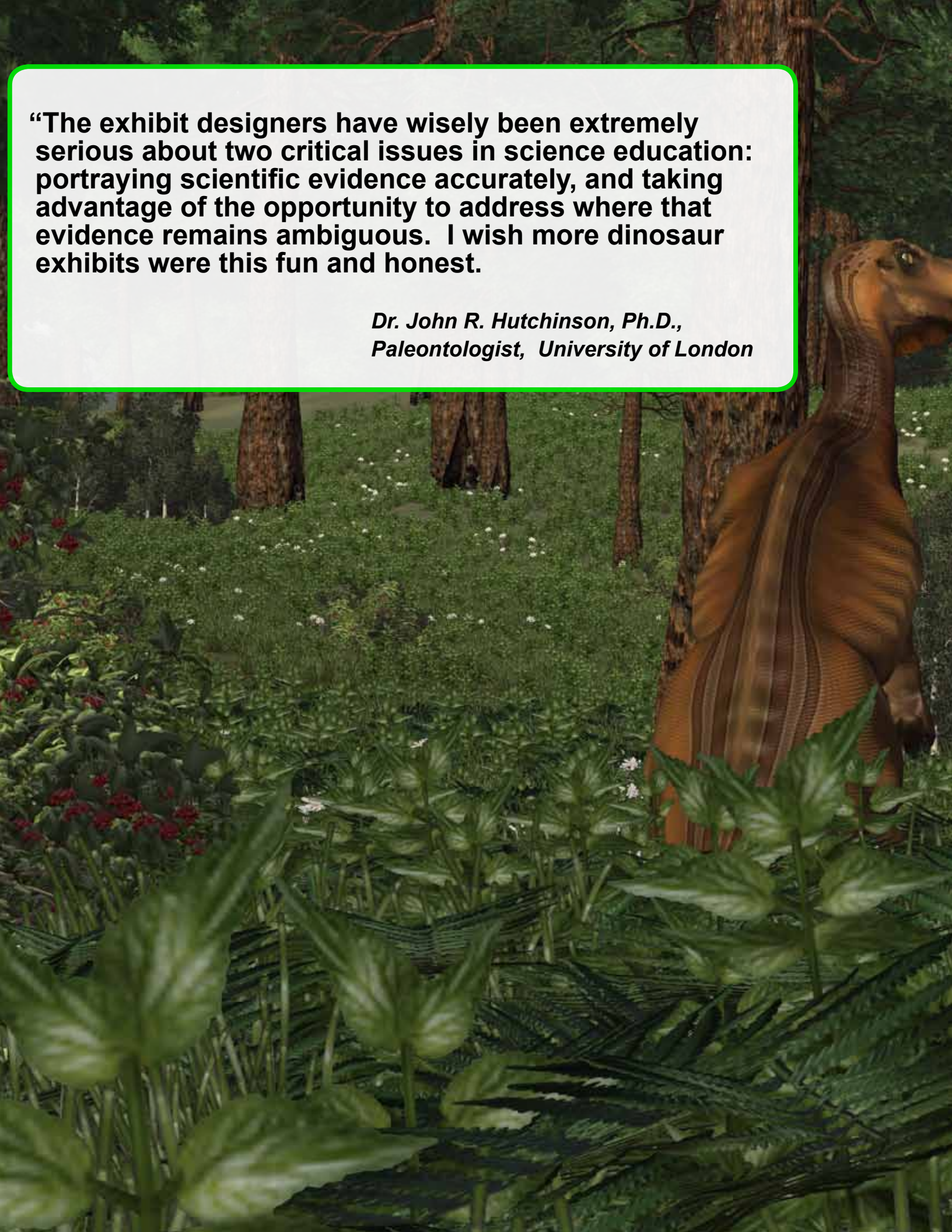
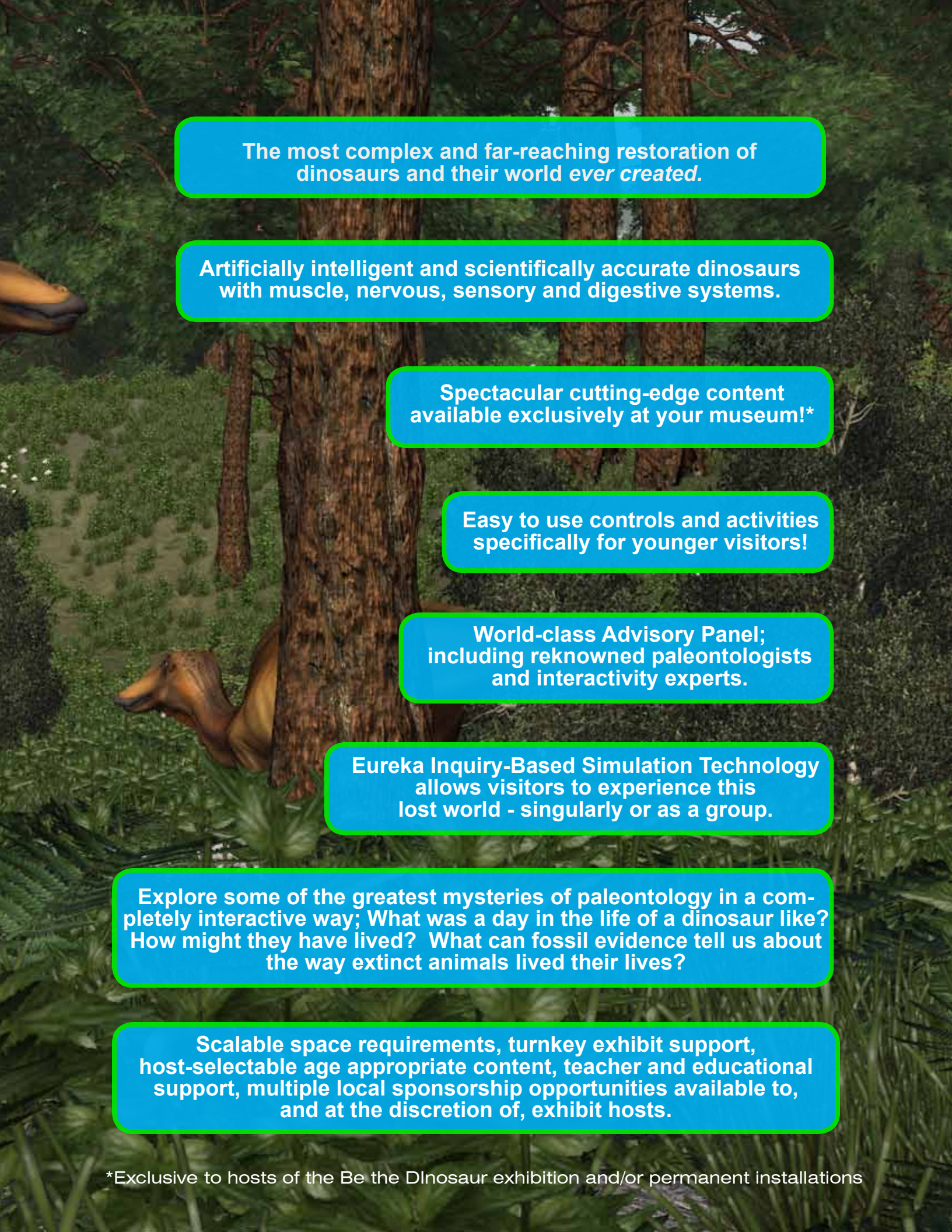


EUREKA EXHIBITS, LLC | 2123 OLD SPARTANBURG RD, SUITE 300 | GREER, SC 29650 | 908-644-3477
WWW.EUREKAEXHIBITS.COM



“The exhibit designers have wisely been extremely serious about two critical issues in science education: portraying scientific evidence accurately, and taking advantage of the opportunity to address where that evidence remains ambiguous. I wish more dinosaur exhibits were this fun and honest.

Dr. John R. Hutchinson, Ph.D.,
Paleontologist, University of London



The most complex and far-reaching restoration of dinosaurs and their world *ever created.*

Artificially intelligent and scientifically accurate dinosaurs with muscle, nervous, sensory and digestive systems.

Spectacular cutting-edge content available exclusively at your museum!*

Easy to use controls and activities specifically for younger visitors!

World-class Advisory Panel; including reknowned paleontologists and interactivity experts.

Eureka Inquiry-Based Simulation Technology allows visitors to experience this lost world - singularly or as a group.

Explore some of the greatest mysteries of paleontology in a completely interactive way; What was a day in the life of a dinosaur like? How might they have lived? What can fossil evidence tell us about the way extinct animals lived their lives?

Scalable space requirements, turnkey exhibit support, host-selectable age appropriate content, teacher and educational support, multiple local sponsorship opportunities available to, and at the discretion of, exhibit hosts.

*Exclusive to hosts of the Be the DInosaur exhibition and/or permanent installations

A quote from a seminar on dinosaur exhibits at the American Association of Museums Annual Meeting and Museum Expo 2005:

Q: "Two things, what's the length and breadth of what the kids wanted to know based on your focus group studies versus what you wanted them to know... What did the kids most express that they wanted to be able to do in the exhibits?"

A: "What they wanted to know is, they wanted to know more about the dinosaurs that they were fans of...What did they do all day?...Could a *T. rex* swim?...Do they ever take a nap?...Do they eat anything other than meat?...What would it be like to be a dinosaur?...

The second part of your question was?...relating to what they...what they wanted to do? Oh, (laughs) ***They wanted to be dinosaurs. They wanted to try things out like a dinosaur. So what the kids wanted to do is they wanted to be in there in the scene, and they wanted to be dinosaurs."***

Now, for the first time in history, they CAN!

Table of Contents

Note: *A unique feature of Be the Dinosaur is its dynamic nature. The simulation is constantly being updated. Content may change in response to new scientific finds, advisor input, remedial evaluation, and other factors at the discretion of Eureka Exhibits, LLC.*

Beauty that isn't just skin-deep. Our digital dinosaurs are life-like reconstructions that not only look great but actually "live" within their digital realm. Digesting food to survive and burning up virtual calories. They move about by virtue of digital skeletons and digital muscles that obey the laws of physics and the limitations of matter. Each creature has its own unique requirements and and limitations, each fits into it's ecosystem in a specific way. They even give off digital "odors" that can be detected by other creatures.

From a *Triceratops*-eye-view a herd consisting of adults and juveniles ambles by. Herd behavior, species cooperation, nurturing young, searching for food - all experiences to be had by visitors to ***Be the Dinosaur***™.

EXHIBIT SUMMARY

What is **Be the Dinosaur™**?

Be the Dinosaur™ is an innovative new traveling exhibit which combines the excitement of inquiry-based exhibit design with the proven appeal of dinosaurs via an integration of traditional physical exhibits and sophisticated computer simulation.

• An expert advisory panel from the fields of paleontology and related disciplines ensures high value educational content.

• The unique blend of traditional and innovative design creates a dynamic that encourages visitors to explore educational concepts and immediately experience them in the Be the Dinosaur™ simulation, repeating the process in a cycle of progressive learning.

- Visitors are encouraged to individually and collaboratively search for key educational goals in order to maximize their simulation experience.
- The truly innovative aspect of ***Be the Dinosaur***™ is the necessary interaction with both traditional and interactive elements to fully experience the exhibit.
- Physical components of the exhibit highlight educational goals reflecting the most current available data on dinosaur biology, behavior, food sources and ecology.
- Educational goals are embodied by the 12 Navigation Icons that are repeated throughout the physical and virtual components of the exhibit.
- Visitors follow the icons and discover the information about dinosaurs and the ecosystem in which they lives that will enable them to experience more and more of the ***Be the Dinosaur***™ simulation.
- Traditional dinosaur exhibit elements are also present, including fossil reconstructions, and informational displays.
- The simulation at the core of the exhibit is based on a specific fossil formation in Western North America. It is one of the most studied fossil formations in the world.
- The virtual ecosystem contains only flora and fauna which are believed to have coexisted in a specific time and place in the formation studied.

What is the intended audience and what will they learn?

The primary intended audience for ***Be the Dinosaur***™ is K-8 and their caregivers.

This first-of-its-kind exhibit, combining traditional exhibit elements with sophisticated computer simulation, has been developed with the advice and oversight of our distinguished panel of advisors.

It was built from the ground-up to focus on what it is that visitors, particularly children, most wanted to know about dinosaurs - What did a dinosaur do all day? What was it like to be one?

TURN TO PAGE 8
TO LEARN MORE!

EXHIBIT ELEMENTS

SIMULATION FEATURES

The simulation at the core of this exhibit is, to-date, the most complex simulation of dinosaurs and their world ever created. For the first time, artificially intelligent dinosaurs roam across realistic terrain. The dinosaurs have simulated muscle and digestive systems. Virtual winds circulate digital odors. Plants grow and have accurate nutritional values. In order to prepare for a trip into this exciting virtual world, visitors will need to “dig” through other exhibit components to unlock the secrets of how dinosaurs survived, and thrived.

EXHIBIT ICONOGRAPHY

Icons representing key educational elements clearly link the subject matter of both the physical and virtual aspects of ***Be the Dinosaur***™ and reinforce the cyclical flow of learning between the simulation and the more traditional exhibit elements.

INTEGRATION OF EXHIBIT COMPONENTS

Be the Dinosaur™ is designed such that time spent in the physical exhibit is necessary in order to make the most of the simulation experience. More time spent absorbing the lessons presented on Amber Pillars, Rock Formation stations, and other physical exhibit components will equip the visitor to perform well in the simulation.

Visitors will be prompted to seek out the required knowledge via the icons. This creates a natural flow between the simulation and physical exhibit elements, as well as providing an organic traffic regulator within the exhibition.

EXHIBIT ELEMENTS (continued)

VOLCANO GATEWAY AND PTEROSAUR

Visitors approaching the Volcano Gateway will feel their excitement build. Glowing streams of lava course down its sides and the Volcano can even be programmed to “erupt” in a puff of smoke at regular intervals. An exciting entryway to set the stage for the experience to come.

The Pterosaur life reconstruction is an exciting theatrical element as well as a thematic signal to visitors that ***Be the Dinosaur*** is a chance to visit the world’s most advanced recreation of an extinct ecosystem. An ecosystem that was home to a great many creatures besides *Tyrannosaurus rex*, *Triceratops* and *Edmontosaurus*.

FIELD STATION AND DINOSAUR SKULLS

The Field Station is designed to point out “How we know what we know”. How did we recreate the dinosaurs? How can we reasonably infer the behavior of extinct animals?

Life-sized fossil casts of the skulls of *Tyrannosaurus rex* and *Triceratops prorsus* bracket the Feild Station. The dinosaur skulls help set the stage for the experience of ***Be the Dinosaur*** as well as communicating the immense scale of these ancient creatures.

SIMULATOR PODS:

Custom designed simulator pods allow the visitor to learn about life as it existed 65 million years ago through an immersive educational simulation. State of the art imaging systems deliver an exclusive High Definition video and audio experience. Simulator Pods are securely networked and are not exposed to the internet.

Custom controls are easy to use and afford distinct and intuitive control functions for dinosaur limbs, head and neck, jaw and even nostrils!

User selectable control options provide easy access for young visitors, visitors with disabilities, and an ‘expert’ setting for more precise and detailed control over your virtual dinosaur to satisfy even the most tech savvy guests.

EXHIBIT ELEMENTS (continued)

ROCK-FORMATION KIOSKS

These kiosks present key information and focus attention on important educational goals in an animated and interactive fashion. In some installations, multiple topics will be presented in a single rock formation kiosk, affording smaller host institutions the ability to maintain the overall integrity of the ***Be the Dinosaur***™ experience in a more compact exhibit space.

DESIGNASAURUS

This touch-screen station allows visitors to experiment with various camouflage patterns, changing dinosaur species and backgrounds to create their own custom designed dinosaur. Visitors can visit the host museum's website (or the Be the Dinosaur Designasaurus site) to try it at home and print or save their creations.

T. REX HEAD FLESH RESTORATION

This FULL scale T. rex head is a 3-dimensional recreation of the star of the "Be the Dinosaur" simulation.

The fearsome T. rex head alone is almost 6 feet long. Extremely durable piece, made of heavy grade plastic with a kid-proof finish. Makes a great photo opportunity and sometimes inspires spontaneous dinosaur role playing!

DINOSAUR SAFARI JEEP

The Safari Jeep takes younger visitors on a narrated "tour" through the virtual environment and although it is geared for the young set it touches on the majority of the same themes as the rest of the exhibit. Informing and asking even the youngest to imagine dinosaurs not as movie monsters but as living creatures within an ecosystem.

AMBER PILLARS

Beautiful glowing panels thrust upwards from rock formations and provide a visually stimulating overview of the main topics discussed in the exhibit. Like other aspects of the exhibition, the icons function to quickly identify each topic and relate each exhibit element to one another.

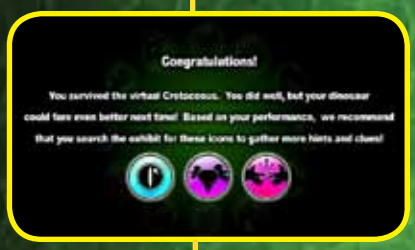


EXHIBIT ICONS

EXHIBIT NAVIGATION ICONS:

Icons representing ***12 major areas*** of the science of ***dinosaurs*** and their ***ecosystems*** clearly link the experiences in the *Be the Dinosaur*™ simulation with the other interactive and traditional elements of the exhibit and reinforce the cyclical flow of learning between the simulation and the more traditional exhibit elements.

Visitors will follow these icons and explore many of the mysteries concerning how dinosaurs may have lived their lives:

"Do I hunt alone or in packs?" *Were tyrannosaurs solitary or social animals? Explore the evidence for and pros and cons of each lifestyle in the simulation and form their own opinions.*

"How do I behave in groups?" *explores social interaction between animals of the same species.*

"How do I find plants to eat?" *The basics of nutrition and digestion, plant species, their roles in the ecosystem, and their modern relatives.*

"The world around me" *defines an ecosystem and discusses the role of plants and animals in balancing the environment.*

"Do I live alone or in groups?" *explores whether dinosaurs were solitary or social animals. What are the benefits and drawbacks to these lifestyles and how would that affect an animal's behavior?*

How do I use my senses? *How an animals senses affect behavior. How we can determine the capabilities of an animal from fossil evidence.*

"How do I stay healthy?" *explores illness and injury in the fossil record, strategies for staying healthy and safe in the virtual Cretaceous simulation.*

EXHIBIT ICONS

EXHIBIT NAVIGATION ICONS (CONTINUED)

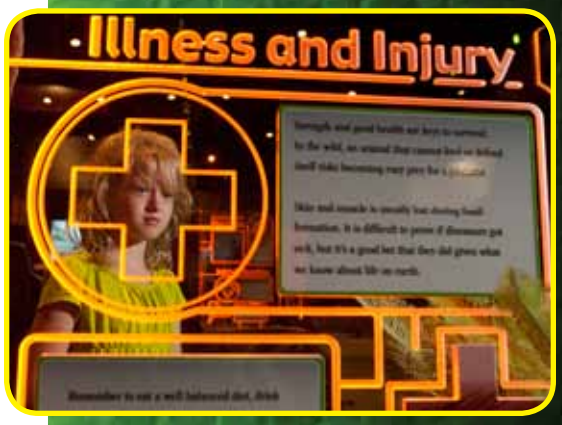
"How do I find food?" *Was T. rex a hunter, a scavenger or both? Experience the evidence for and against as well as the benefits and risks. Visitors try out these behaviors and form their own opinions on the subject.*

"Creatures that share their world" *provides an overview of the other animals (mammals, reptiles, birds, fish, insects and amphibians) that lived in the Late Cretaceous.*

"T. rex and the lives of carnivores" *discusses Tyrannosaurus rex as an example of a carnivorous animal, including what its anatomy suggests about possible behavior.*

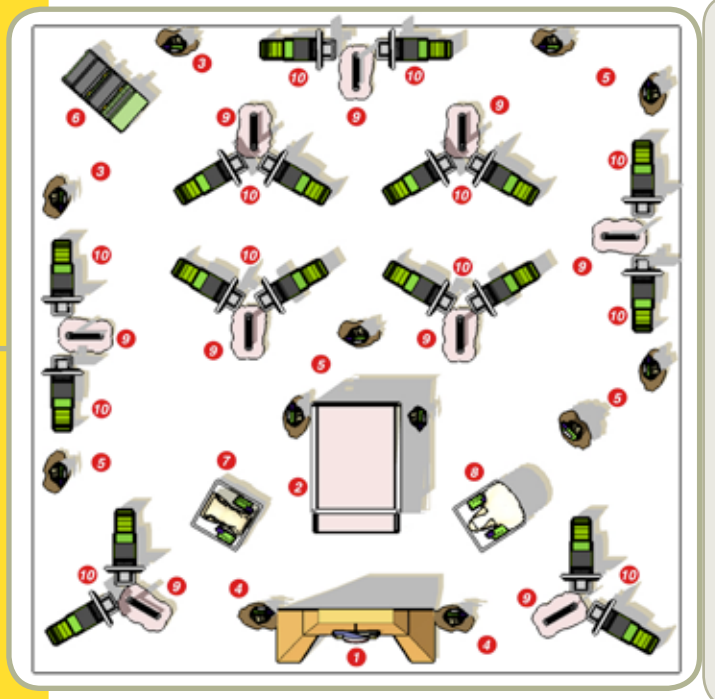
"Do I defend myself?" *explores what the anatomy of an animal suggests about how it might have protected itself. Explores fight or flight, the ways in which an animal might defend itself.*

"The Lives of Herbivores." *A look at triceratops and edmontosaurus, the most numerous herbivores of the time, as examples of plant eating animals. Discusses what their anatomy suggests about possible behavior.*



SAMPLE EXHIBIT FLOOR PLAN

SAMPLE EXHIBIT FLOOR PLAN



LEGEND

1. Volcano Gateway
   (Features glowing “lava” and optional smoke “eruptions”)
2. Paleontology Field Station
3. Designasaurus
4. *Tyrannosaurus rex* life-size Head Flesh Restoration
5. Rock Formation Station (Video On Demand)
6. Dino Safari Jeep
7. *Tyrannosaurus rex* life-size skull cast
8. *Triceratops Prorsus* life-size skull cast
9. Amber Pillars
10. ***Be the Dinosaur***™ Simulator Pods
11. Pterosaur Life Restoration (ceiling mount, 11ft. wingspan)
12. Assembled Exhibit

10

9

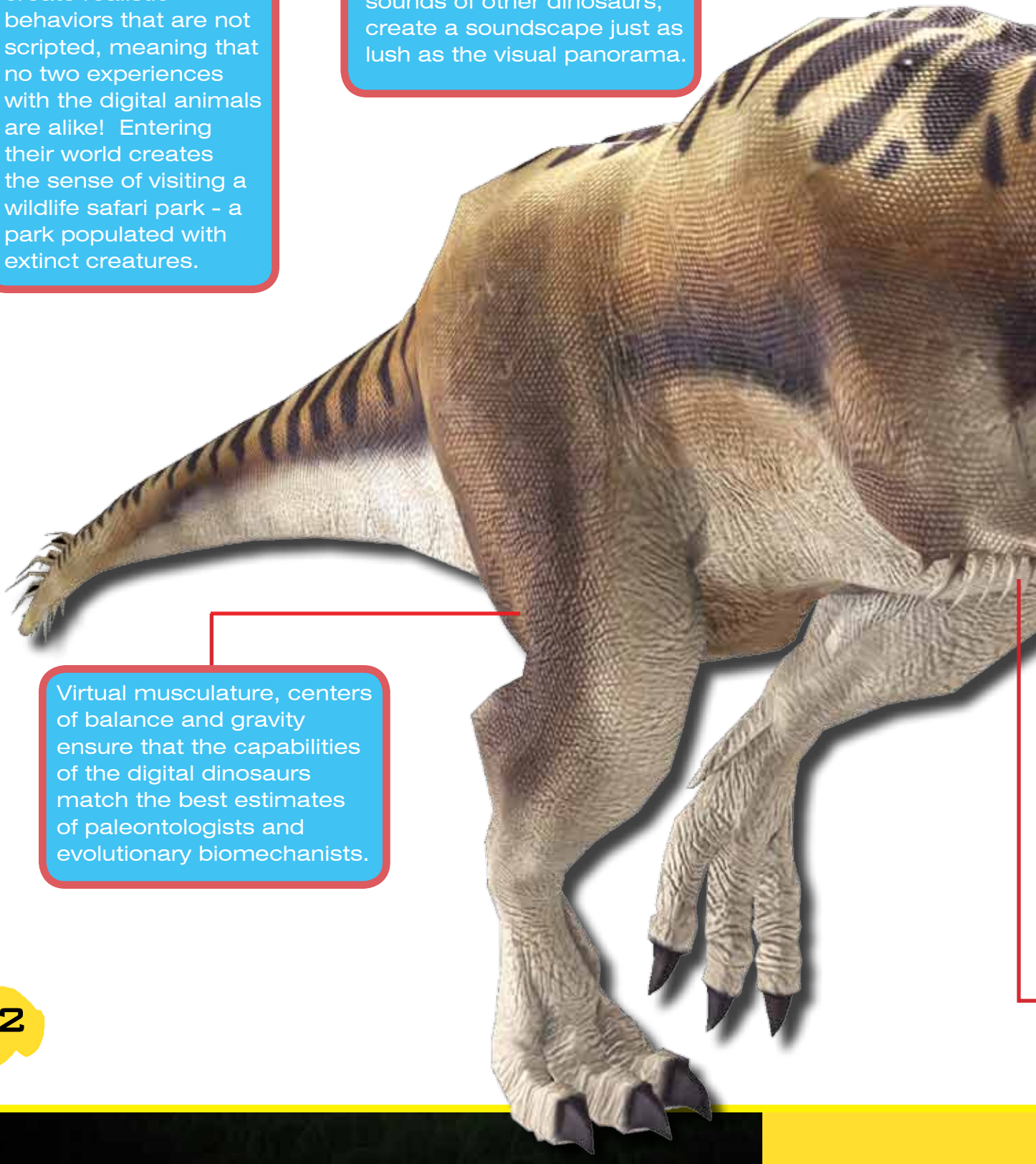
11

12

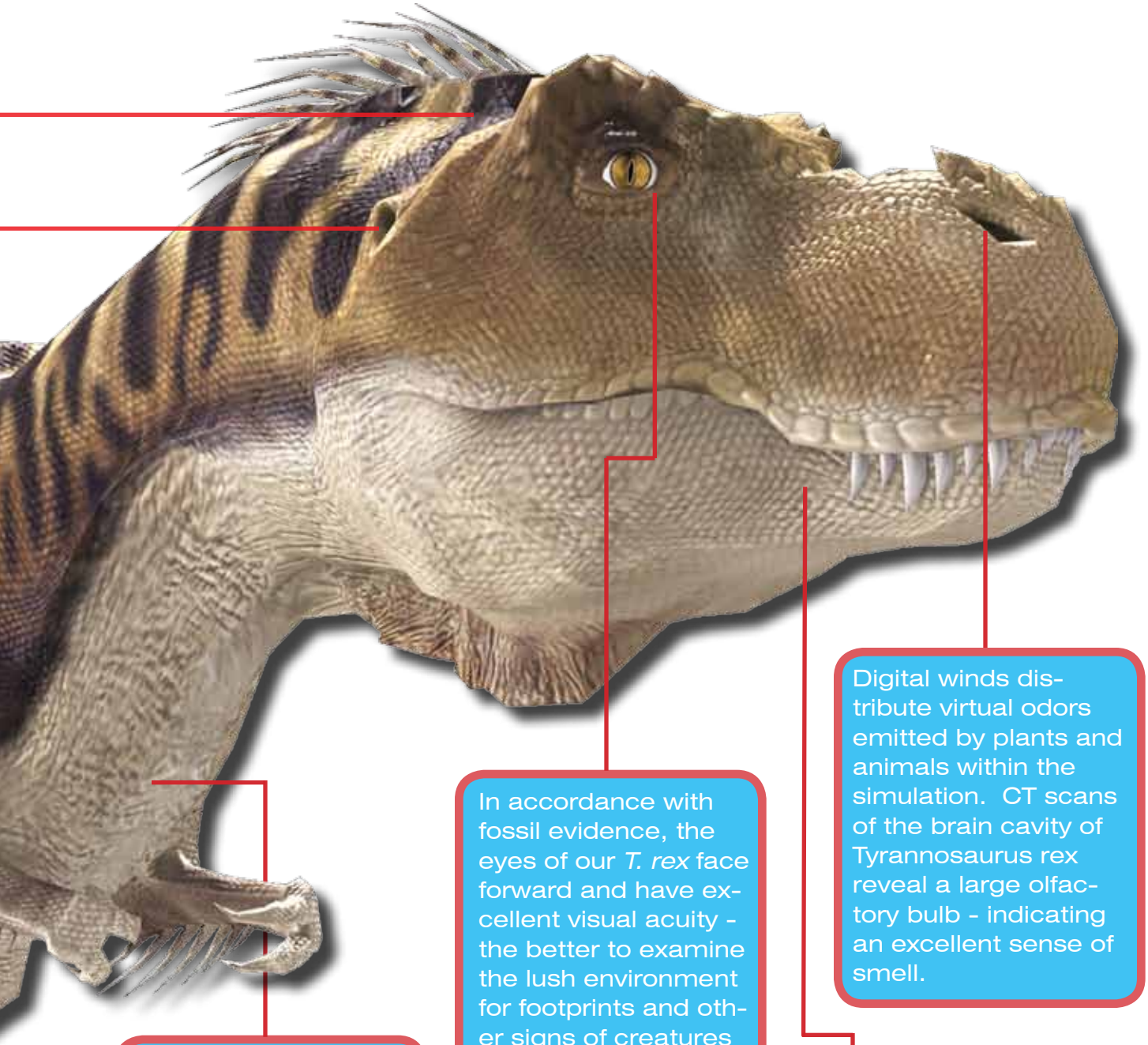
ANATOMY OF A VIRTUAL DINOSAUR

Ground breaking Artificial Intelligence created with paleontological input. Drives like hunger, thirst, fear and anger create realistic behaviors that are not scripted, meaning that no two experiences with the digital animals are alike! Entering their world creates the sense of visiting a wildlife safari park - a park populated with extinct creatures.

Just as in reality, a keen sense of hearing alerts animals to their surroundings. Sounds from the rustling of leaves to bird calls and the sounds of other dinosaurs, create a soundscape just as lush as the visual panorama.



Virtual musculature, centers of balance and gravity ensure that the capabilities of the digital dinosaurs match the best estimates of paleontologists and evolutionary biomechanists.



Digital winds distribute virtual odors emitted by plants and animals within the simulation. CT scans of the brain cavity of Tyrannosaurus rex reveal a large olfactory bulb - indicating an excellent sense of smell.

In accordance with fossil evidence, the eyes of our *T. rex* face forward and have excellent visual acuity - the better to examine the lush environment for footprints and other signs of creatures that share its world.

The chest rises and falls with respiration and a heartbeat that changes with exertion. The animal's stamina is directly affected by nutrition and health.

Teeth and jaws and bite-force that match fossil evidence and a head and neck that can move independently of the body.

A virtual digestive system converts food into energy and waste. Foods with low nutritional value will fill the stomach but yield few calories.

SIMULATION SCREEN ELEMENTS

Human beings perceive the world primarily by sight and sound - but for other animals, such as dinosaurs, their sense of smell is just as important. To give visitors a clearer picture of the role scent may have played in the daily lives of these creatures, the simulation converts scents into dynamic color coded arrows that appear when visitors, in their role as a denizen of the Cretaceous, take a virtual "sniff". Odors and their importance and meaning will be one of the many lessons that visitors will take with them from the traditional portions of the exhibit into the virtual Cretaceous.

"Instinct Box Pop-Ups" appear, providing valuable information on everything from other animals, nutrition, and terrain. Along with the icons these Pop-Ups clearly link the physical and virtual aspects of ***Be the Dinosaur***™.

New discoveries? No problem!

When new discoveries contradict the displays in a traditional exhibit, it can be a costly and time consuming issue to resolve. For ***Be the Dinosaur***™, however, it is no issue at all. The flexibility of the simulation approach will allow new discoveries to be integrated, at host approval, in a matter of days from an announcement of findings.

For example - it had long been thought that grasses did not become common until long after the dinosaurs died out. Recently it has come to light that grasses and dinosaurs did in fact co-exist, with herbivores from the Southern hemisphere consuming as many as 5 different types. (Science vol 310, p 1177).

If grasses were discovered in Northern Hemisphere formations, a simulation update would be automatically performed that added (Advisor-approved) grasses to the ground cover allowing for our hosts to present the latest in scientific findings to their visitors.

ADVISORY PANEL

***Be the Dinosaur*™** has been developed with the ongoing collaboration of our distinguished advisory panel from the fields of paleontology, academia, and interactive entertainment/software design. Their advice and contributions to the design and development of the exhibit have been invaluable to the project. Our sincere appreciation goes to:

Chief Scientific Advisor

Dr. John Hutchinson, Ph.D., Professor of Evolutionary Biomechanics, Structure and Motion Lab, Royal Veterinary College of U.K.. Associate Editor for Proceedings of the Royal Society B (Biological Sciences), Winner of the Society for Vertebrate Paleontology's Romer Prize, elected Fellow of the Linnean Society and was awarded the Charles Darwin Lecture at the British Science Festival in 2012.

Paleontology Advisors:

- Dr. James O. Farlow, Ph.D., Professor of Geology, Indiana Purdue University
- Dr. Thomas Holtz, Ph.D., Chair, Department of Geology, University of Maryland
- Dr. Dale. A. Russell, Ph.D., Senior Curator of Paleontology, North Carolina Museum of Natural History
- Dr. Manabu Sakamoto, Ph.D., paleontologist, Department of Earth Sciences, University of Bristol, U.K..

Interactivity Advisors:

- Eugene P. Jarvis, A software pioneer and world famous designer of interactive entertainment. Recipient of the International Game Developer's Assoc. Lifetime Achievement Award.
- Kathleen Gareiss, Senior Partner, Executive Director of Project Management & Interactive Operations, Ogilvy Interactive

Visitor Studies/Museum Advisors:

- Scott Alvey, Director, Design Studio, Kentucky Historical Society, previously Director of Visitor Interaction, Louisville Science Center.
- Dr. Rob Ross, Ph.D., Education Director, Paleontological Research Institute and the Museum of the Earth
- John Kelton, Visitor Studies, Exhibit Evaluations, Designer, and Fabricator, Kelton Design LLC, Huntsville, Alabama
- Ronald Ross, Director of Alumni Affairs, Drew University, Board of Directors, Liberty Science Center (for Gov. Thomas H. Kean)
- L. Scott Miller, Executive Director of the Consortium on Higher Academic Performance, Graduate School of Education, U.C. Berkeley

EDUCATIONAL GOALS

NATIONAL EDUCATION STANDARDS

The educational objectives of ***Be the Dinosaur***™ are based on National Science Education Standards. The intended audiences are grades K-4 and 4-8. All teacher's guides and lesson plans will be correlated to pertinent State and Local Standards as appropriate for each host institution.

SCIENCE - GRADES K – 4 and 5-8

- NS.K-4.1/NS.5-8.1 Science as Inquiry
- NS.K-4.2/NS. 5-8.2 Physical Science
- NS.K-4.3/NS.5-8.3 Life Science
- NS.K-4.4/NS.5-8.4 Earth and Space Science
- NS.K-4.5/NS.5-8.5 Science and Technology
- NS.K-4.6/NS.5-8.6 Science in Personal and Social Perspectives
- NS.K-4.7/NS.5-8.7 History and Nature of Science

GEOGRAPHY - GRADES K - 12

- NSS-G.K-12.1 The World in Spatial Terms
- NSS-G.K-12.2 Places and Regions
- NSS-G.K-12.3 Physical Systems
- NSS-G.K-12.5 Environment and Society
- NSS-G.K-12.6 Uses of Geography

TECHNOLOGY - GRADES K - 12

- NT.K-12.1 Basic Operations and Concepts
- NT.K-12.2 Social, Ethical, and Human Issues
- NT.K-12.3 Technology Productivity Tools
- NT.K-12.4 Technology Communications Tools
- NT.K-12.5 Technology Research Tools
- NT.K-12.6 Technology Problem-Solving and Decision-Making Tools

VISUAL ARTS - GRADES K - 4

- NA-VA.K-4.1 Understanding and Applying Media, Techniques, and Processes
- NA-VA.K-4.2 Using Knowledge of Structures And Functions
- NA-VA.K-4.3 Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas

21st Century Skills – Critical Thinking, Analyzing Information, Comprehending New Ideas, Applying Knowledge to New Solutions, Communicating, and Collaborating

Curriculum Areas – Science (Earth and Space), Math, Art, Language Arts, History

Science and Literacy Skills – Observing, Analyzing, Experimenting, Drawing Conclusions, Communicating Results

Types of Play – Free, Solitary, Parallel, Cooperative, Pretend

Multiple Intelligences – Verbal-Linguistic, Mathematical-Logical, Visual-Spatial, Bodily Kinesthetic, Interpersonal, Intrapersonal, Naturalist

In a screenshot from the simulation, we gaze out through the eyes of a *Triceratops horridus* on a sight not seen for approx. 70 million years - a primeval forest of accurate Cretaceous trees and plants, with a group of Hadrosaurs fleeing for the safety of the trees. All flora and fauna go through the same process of paleontological review and modification as the animals in our simulation - all to ensure as accurate and educational an experience as possible.

Be the Dinosaur™

SAMPLE EXHIBIT CONFIGURATIONS

Exhibition Highlights

- An innovative blending of traditional exhibit components and cutting-edge inquiry-based computer simulation designed to foster a cycle of progressive learning.
- It is the 21st century - standing and staring at mechanical dinosaurs just doesn't cut it anymore. In ***Be the Dinosaur***™, guests take control of their own dinosaur and explore a fully interactive digital reconstruction of the most complex restoration of an ancient ecosystem ever created.
- Developed with the guidance of a world class Advisory Panel.
- Focused scenarios let guests experience the day-to-day lives of the dinosaurs. Living and learning in their world, understanding their effect on the environment and its effects on them.
- Experience what it was like to BE a dinosaur - *together*.
- Guests explore the different theories of dinosaur behavior interactively, the exhibit poses the major questions regarding dinosaur behavior and allows visitors to follow lines of inquiry at their own pace and according to their own interests.

Exhibition Tour

- Seasonal rentals on the SMEC schedule (Fall, Spring, Summer)
- Extended rentals available at discounted rates.
- More than 30 museums across North America have hosted "Be the Dinosaur" including COSI, U.S. Space and Rocket Center/Space Camp, Mayborn Museum at Baylor University, and many more.

Requirements

- Square Footage from 1,000 to 6,000 sq. ft.- Varies by Configuration
- Standard 110v Power, Grounded Outlets – Varies by Configuration
- Tallest component heights are adjustable from 8' to 16'6" ceiling heights
- Volcano Gateway requires 15' ceiling height.
- All components can break down and fit through standard double door.

Included with the exhibition rental

- Education manual, teacher's kits, and training guides.
- Interactive website with online educational videos and experiences, exhibit primers and teacher resources
- Marketing kit including press photos, sample print advertisements and b-roll video
- Installation and ongoing maintenance support.
- Simulation updates to remain current with the progress of both scientific knowledge and the state of the art in computer simulation – all without the need to draw upon host's staffing resources.
- Demonstration scripts and props including replica fossils.

Be the Dinosaur™

SAMPLE EXHIBIT CONFIGURATIONS(cont'd)

Tyrannosaurus Rex Configuration

4500-6000 Square Feet.

16 Simulator Pods (additional pods available)
7 Amber Pillars
8 Rock Formation Kiosks
Paleontology Field Station
Designasaurus Station
Dinosaur Safari Jeep
Full-size Tyrannosaurus Rex and Triceratops skull replicas
Volcano Entry Gate (glowing lava and option smoke eruptions)
Pteranadon (11ft wing-span)

Triceratops Configuration

3500-4500 Square Feet

12 Simulator Pods (other options available)
5 Amber Pillars
6 Rock Formation Kiosks
Paleontology Field Station
Designasaurus Station
Dinosaur Safari Jeep
Full-size Tyrannosaurus Rex and Triceratops skull replicas

Edmontosaurus Configuration

2500-3500 Square Feet

8 Simulator Pods (other options available)
3 Amber Pillars
4 Rock Formation Kiosks
Paleontology Field Station
Designasaurus Station
Dinosaur Safari Jeep
1 Full-size Tyrannosaurus Rex or Triceratops skull replicas

Velociraptor Configuration

1500-2500 Square Feet

4 Simulator Pods (other options available)
1 Amber Pillar
2 Rock Formation Kiosks
Paleontology Field Station
Designasaurus Station

Pterosaur Configuration

1000-1500 Square Feet ***(Purchase Only)***

2 Simulator Pods (other options available)
1 Rock Formation Kiosk
Software and Icon rights

Pricing varies with exhibit size and options and is designed to be affordable to museums of all sizes and budgets.

The exhibition can be customized for your space with additional Simulator Pods, replica fossils, and skeletons. For pricing, availability, **Simulator Purchases** or additional information please contact:

Mark Kirby
Eureka Exhibits
Phone 908.644.3477
Kirby@eurekaexhibits.com

FREQUENTLY ASKED QUESTIONS

Q **How was the exhibit created?**

A The exhibit is the product of over 5 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!*

Q **Is the simulation a "simulator ride" such as those that are sometimes set up in museums and malls?**

A No, not at all. The simulation is a fully interactive experience where events will occur differently for each visitor. ***Be the Dinosaur***™ allows visitors to step into a fully interactive world, to formulate their own hypotheses about dinosaur behavior and test them out. A ride is passive, whereas ***Be the Dinosaur***™ is an **inquiry-based exploration** of the twilight age of the dinosaurs, meticulously recreated according to the dictates of some of the world's most esteemed paleontologists.

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

A No…. the standard settings for the simulation have visitors entering 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. Thus 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.

Making entry into the simulation "blind" also invests the traditional exhibit elements with value in the eyes of the visitor, because 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.

Every installation of *Be the Dinosaur*™ includes simulator pods with selectable control schemes for young visitors and designed to be more accessible to persons with disabilities.

FREQUENTLY ASKED QUESTIONS

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

A Visitors 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. More time spent absorbing the lessons presented on the Amber Pillars, in the Rock-formation kiosks and other areas will result in substantially longer simulation experiences. 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. This will create a natural flow between the simulation and the other exhibit elements and provide an organic traffic regulator within the exhibition.

Q **Can visitors experience a scenario privately with their group or family?**

A Yes, it is possible to link up to 128 simulator pods at a single location or via broadband network, all interacting within the same scenario. Visitors will see on-screen prompts that enable them to limit their experience in any of a number of ways, including disabling predatory behaviors on their own in those cases where the host has left them enabled.

Plant-life not only looks realistic, but acts realistically. Trees sway in the wind, plants bend and break with the passage of dinosaurs, some will even spill sap, attracting virtual insects. Each plant has a defined nutritional value, enabling them to be virtually digested by simulation animals.

Q **Will there be lines at the simulator pods?**

A At times of peak traffic, there might be short lines – but as stated previously, the exhibit is designed to foster a cyclical visitor movement between the simulators and the traditional exhibit areas that will mitigate the formation of long lines even during peak attendance.

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

A 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 would find that it wasn't much fun, and their trips inside the virtual Cretaceous would be very short ones. The fun of the exhibit is tied directly to learning and demonstrating knowledge of the subject matter while interacting with the simulation.

FREQUENTLY ASKED QUESTIONS

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

A 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.

Q **What are the scenarios based on?**

A The simulation is based directly off of 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 we have created a number of different interaction possibilities. 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.

Q **Will this exhibit tax our maintenance or exhibits staff?**

A No. ***Be the Dinosaur***™ is designed to be a completely turnkey experience. Aside from powering down the simulator pods at the end of the day, all of the exhibit elements will function automatically. Updates, as in the case of new scientific discoveries added to the simulation, are performed automatically and without the need for museum staff involvement. In the unlikely event of failure, back-up computer cores for the Simulator Pods

All of the recreated life forms in ***Be the Dinosaur***™ go through an extensive paleontological review process that doesn’t end once the exhibit ships out. Regular updates will keep the exhibit scientifically current without drawing upon host resources - all thanks to the built-in flexibility of the core simulation.

FREQUENTLY ASKED QUESTIONS

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

A

Yes - but limiting the focus to *T. rex* and Triceratops was made for both scientific and educational reasons.

Scientifically, ceratopsians like *Triceratops horridus* and *prorsus* made up over 60% of all the animals in the ecosystem. *Tyrannosaurus rex* made up about 4%-16%. Hadrosaurs like Edmontosaurus, the other major species in the *Be the Dinosaur* simulation, made up approx. 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 is focused 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 their minds. During remedial evaluation we discovered that less was indeed more. Too many dinosaurs and the message becomes lost - the opportunity to compare and contrast, for example, tyrannosaurs as scavengers or hunters becomes obscured.

In addition, the *Be the Dinosaur* simulation contains the flying Pterosaurs, insects, mammals scurrying through trees and brush, fish, amphibians such as turtles, and more.

Q **Will there be future updates or exhibits similar to this one?**

A

Yes Be the Dinosaur will receive periodic updates to the software and underlying technology. The first of these Expansion Updates, completed in 2011, added an additional dinosaur the Edmontosaurus, egg and nest tending behaviors, and numerous other graphical and artificial intelligence enhancements.

Our next exhibit “Be the Astronaut” will premier in 2014. Future updates and exhibits/simulations are in the works. Check www.eurekaexhibits.com for more information.

Q **Can I get the simulation to play at home?**

A

No. *Be the Dinosaur* is designed for the museum environment - to give museums a new weapon to compete with the myriad of entertainment options available to modern families and children. The greatest interactive dinosaur experience ever made is not in Hollywood or at some grand resort, its not on Xbox360, Wii or Playstation3 - it’s at *your museum.*

NOTES

The exhibition can be customized for your space with additional Simulator Pods, replica fossils, and skeletons. For pricing, availability, **Simulator Purchases** or additional information please contact:

Mark Kirby
Eureka Exhibits
Phone 908.644.3477
Kirby@eurekaexhibits.com

- Inquiry based learning
- Interactivity
- Exciting subject matter
- Activities for ALL age groups
- World class content experts
- Paleontologist speaker included
- Deep experience fosters repeat visits
- Turnkey exhibit support
- Teacher and educational support
- Advertising and sponsorship support
- Scaleable size and space requirement
- Host selectable age-appropriate content
- FUN!

About the Cover:

This cover image is an actual screenshot from the Be the Dinosaur simulation. It was rendered by our standard simulator pod in 1/60th of a second.