

Educator's Guide



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Educator's Guide Sections

National Science Education Standards are available at the following website http://www.nap.edu/readingroom/books/nses/html/

This Educator's Guide includes the following standards;

- National Standards
- Colorado Model Content Standards
- Connecticut Curriculum Connections
- New Jersey Core Curriculum Content Standards for Science
- Arizona State Teaching Standards
- *All teaching standards can be found at the end of this booklet.



Introduction

Learn the basics of paleontology and oology (the study of eggs) with fun facts and trivia.



Dinosaur Sections

The exhibit is divide into six sections that each feature a family of dinosaurs; Ceratopsian, Sauropod, Ornithopod, Theropod, Giant Oviraptor, and an enigma. Learn about the characteristics of each family, what size and shape eggs did they lay, how did they care for their young, where and how did they live.



Classroom Projects

Explore the educational possibilities of some "egg-tivities" and "egg-speriments" designed for classroom use. The activities on pages 12-24 are best used before visiting the exhibit, the activities on pages 25-66 are can be used before or after, and the activities on pages 20-36 can be used after visiting the exhibit.



Introduction

Students will use the study of dinosaur eggs to exercise their reasoning and creative abilities to formulate ideas about how we know about dinosaurs, when they lived, how they cared for their young, and the adaptations that enabled them to survive. They can use their insights to think about the adaptations that equip modern egg laying animals for survival in the various environmental conditions that exist today.

- Paleontologists study fossil plants and animals.
- **Paleontologists** draw conclusions about dinosaur family life from studying **"life assemblages"** that preserve the behavior of the animal at the moment of its death.
 - a. Were Dinosaurs social animals?
 - b. Did they care for their young?
 - c. What was life like for baby dinosaurs?
- Dinosaur eggs are fossilized, and very rarely, some contain fossilized baby dinosaurs.
- Some dinosaurs were **Altricial** needing intense parental care when they hatched.
- Some dinosaurs were **Precocial**, ready to fend for themselves when they hatched.
- Dinosaurs were on the earth during the Mesozoic era -middle time.
- Mesozoic era includes the Triassic, Jurassic and Cretaceous periods

Words formatted with an <u>underline</u> are listed on the Dinosaur Names page with a brief description. Words formatted in **Bold** text can be found on the Vocabulary page.



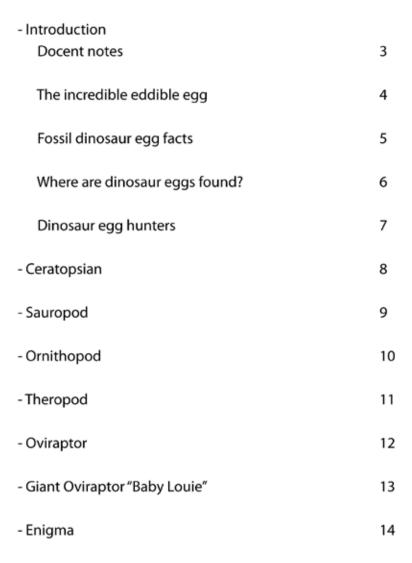
Explore the mysteries of dinosaur family life

Docent's Gallery Guide



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Introduction

Docent notes

Adjust your tour to blend your interests with the interests and age of your group. Sample answers provided are a level young children can understand. Older children and adults may have more advanced answers to offer for discussion.

- You will not be able to include all of the information provided.
- 6-7 "stops" for discussion will probably be plenty.

If you have confidence, have students look into the case and ask questions. Throw questions out to their peers to generate as many possible ideas.

Why do you say that?

How do you know that?

What would happen next?

These kids know a lot and LOVE to share their knowledge!

How we know about dinosaurs

No humans, no photographs, this was 65 million years ago, long before humans!! The way we learn about them is by studying their remains.

- Their "remains" are called FOSSILS, which means "dug up".
- FOSSILS are formed when remains, such as eggs or bones are buried and covered with sediment.
- The pores become filled with minerals.
- They harden over long periods of time and preserve the original shape.
- There are two types of dinosaur fossils "life assemblages" and "death assemblages"
 - A fossil "life assemblage" occurs when a catastrophic event occurred so suddenly that the dinosaurs were buried fast enough to preserve them in action. They reveal much more than just the bones themselves.
 - A "death assemblage" is when an animal dies and then is buried after the body may have been moved around by predators, weather, or rivers.



CONGRATULATIONS!

THIS CERTIFICATE STATES THAT

became a self taught paleontologist at the "Hatching the Past" dinosaur egg exhibit at the Quary Hill Nature Center.

SIGNED

DATE

Hatching **Past**

Dinosaur Eggs and Babies

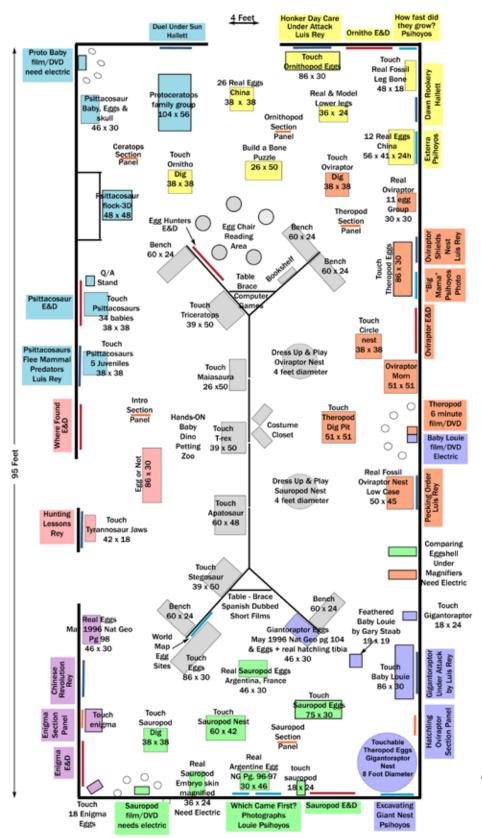
Adventure Guide

Paleontologists study fossils of plants and animals that lived long ago. These fossils are clues to the past.

Be a dinosaur detective!

Use this adventure guide to explore the "Hatching the Past" dinosaur exhibit.
Study fossil clues in the exhibit to become a paleontologist.



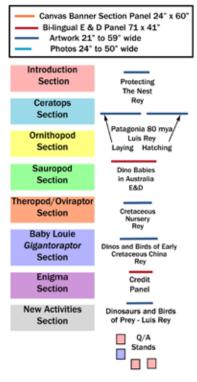




Boonshoft Museum of Discovery Dayton, Ohio

May 23, 2015 - August 23, 2015

Suggested Floor Plan 4300 sq ft



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