

Hartman Prehistoric Garden Geo Treasure Hunt



#1

Glassy volcanic rock shot through with white calcite veins and xenoliths (foreign rocks) of olivine. This large black rock represents the Cretaceous volcanoes that were active at the time of the dinosaurs.



#2 Sand-size grains of broken shells were deposited as lime sand on a Cretaceous offshore bar. A chemical reaction occurred sometime not long after deposition cemented it into the hard limestone.



#3 This microcave has a pale orange filling and mini-stalactites and stalagmites. The calcite below it, probably also a cave fill, has beautiful white calcite crystals. The limestone was deposited during the Cretaceous, at the time of the dinosaurs, but the caves formed much later.



#4

Water has dissolved a crack through the Edwards limestone. Sit here and think about how fast it dissolves. The caves are much younger than the dinosaur footprints that are in the rock. Imagine how long ago dinosaurs were walking around!



#5

The Prince Sago, a large tree fern, was an important part of the Mesozoic landscape. This one was imported from Taiwan. Do you think dinosaurs could have eaten them?

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#6 Fossilized wood (also called petrified wood) is ancient wood that has been replaced by minerals, mostly fine-grained quartz. Plant fossils like these help us reconstruct the ecosystems of dinosaurs.



#7
The magnolia is a flowering plant that was newly evolved at the time of the dinosaurs. This one is called a banana magnolia because of the fragrance of its flowers in spring.



#8
Insects were an important part of the Mesozoic landscape; they predate the prehistoric garden.



#9 Limestone is a rock created mostly by living things. These high-spired snails (gastropods) grazed on algae and are common near trackways.



#10
Trackways of a three-toed dinosaur are copies made in slightly harder limestone than the originals. If you look closely you can see the saw and chisel marks, which tell you that they are copies. How many can you find in the garden?

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#11 Chert nodule in limestone. This hard rock, also called flint, is formed of microcrystalline rock that was used by Native Americans to make arrowheads.



#12 This force of nature is important in exposing trackways at the surface and adds to any garden.



#13 Horsetails are ancient plants that evolved even before the dinosaurs, during the Carboniferous Period.



#14 Replica of a fossil turtle shell found during the excavation of dinosaur tracks. The turtle was part of the dinosaur ecosystem. The display at the Texas Memorial Museum shows how fossil fragments of a turtle were reconstructed.