

“Bugs...Outside the Box”- A Prospectus



Conceptual Rendering, Gallery View



Bugs at an Unusual Size

The world of insects is all around us. Cleverly camouflaged or flamboyant in their displays, their diminutive size frequently keeps them from attracting our attention. Important to science and necessary in the natural world, the unexpected artistry and beauty of insects can usually only be fully appreciated under a magnifying glass. Until now.

Bugs: Outside the Box presents a selection of greatly enlarged insect sculptures, each showcasing the beauty hidden within the (mini)beasts of the natural world.

Butterflies with five foot wingspans and beetles, four feet long, that can stare you square in the eye are only two examples of the unique sculptures on display in this unique exhibition.

Intricate details not visible to the naked eye are showcased alongside educational topics, including an exciting look at museum collections and taxonomy, and an exploration of the power of magnification.



Stag Beetle, Approximately four feet in length.

Exhibition Details



The Presentation

The primary focus of this exhibition is the beauty in the details that exist beyond our everyday powers of observation. Exhibition furniture and graphics are a subtle background to the center attraction, the sculptures themselves.

The sculptures are placed upon large bases, and are grouped to represent various topics. Each side of the bases contain unique information: relevant and interesting facts pertaining to the Dorsal and Ventral (top and bottom) views of the sculptures; balanced by touchable, sculptural body parts, replicas of the sculptures immediately adjacent, for a tactile experience.

Interpretive Information

Introduction

Upon entering the gallery, the visitor is greeted by a butterfly with a five foot wingspan, flanked by introductory graphics.



Introduction

Additional graphics in the introductory section touch on the broad concepts explored in the exhibit, such as: The Impact of Magnification; Taxonomy and Museum Collections; Insects and Arthropods within Museum Collections.

The Impact of Magnification

The backside of the Introductory Module contains information on the impact of magnification. The use of actual (or similar) specimens of the sculptures as comparison is established at this point in the exhibit, and an explanation of the history and usage of magnification is presented.

To further encourage learning and exploration of this concept, several different magnification strengths are available to the visitor through mirrors and microscopes. Magnification from 5x up to 400x are provided for exploration at the **Magnification Stations**.



Magnification Stations.



Preliminary Graphic Design With Mounted Specimen

Taxonomy and Museum Collections

The practice of collecting all types of materials from the natural world as well as the world of man has been an important endeavor for centuries. Well preserved and organized biological collections such as insect collections serve as wells of information that may provide answers to many questions that face us today; how does the biodiversity of an area change over time? How are populations of insects related to one another?

Other questions are addressed in this section as well; how do scientists communicate accurately with one another about their findings if they don't speak the same language, or even live in the same era? And why is it important to continue to collect and maintain museum collections?

In addition, basic concepts and terminology about what's behind museum collections are accompanied by a display of the tools of the trade – from equipment for field collecting to finer implements used for mounting, preserving and observing specimens.

Sculpture Groupings

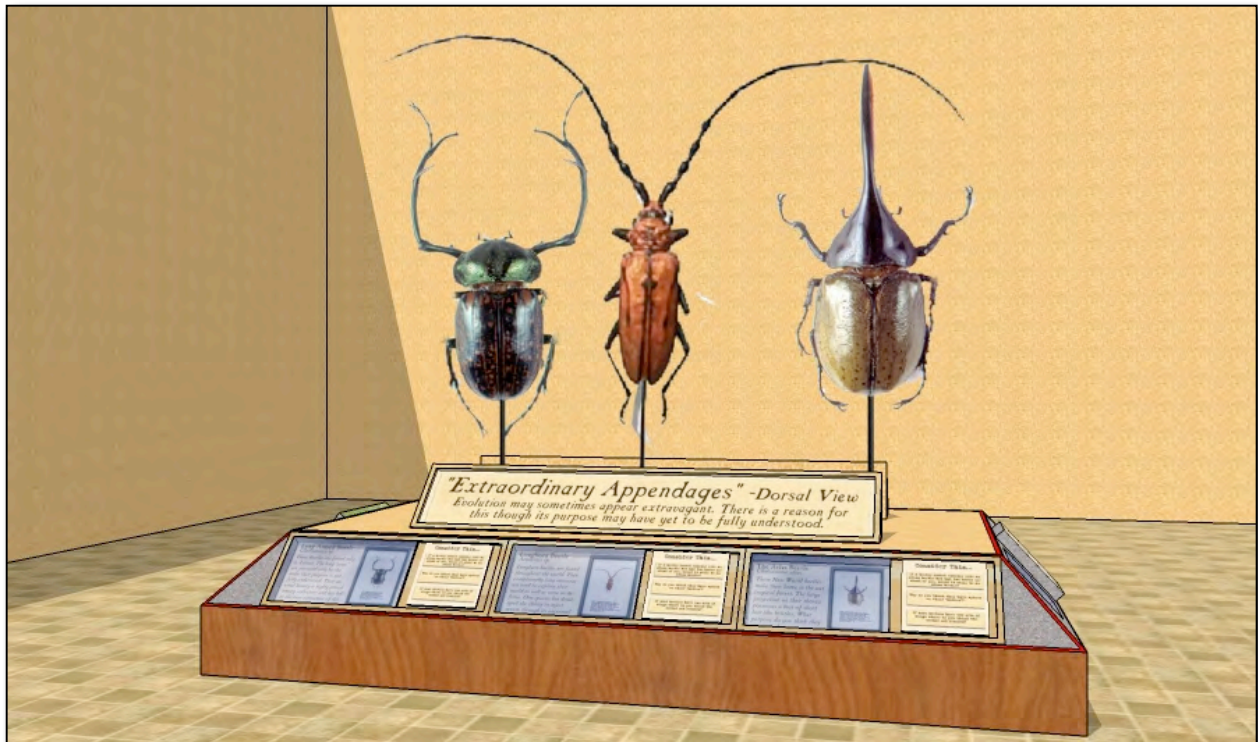
Amazing Armour

The models included in this topic are equipped with impressive exoskeletons. Massive jaws and other embellishments are striking at life size and even more so at great size. But what purpose do they serve? Are these remarkable features merely ornamentation, or are they useful to the animal that carries them?



Preliminary Design: Extreme Exoskeletons

Extraordinary Appendages

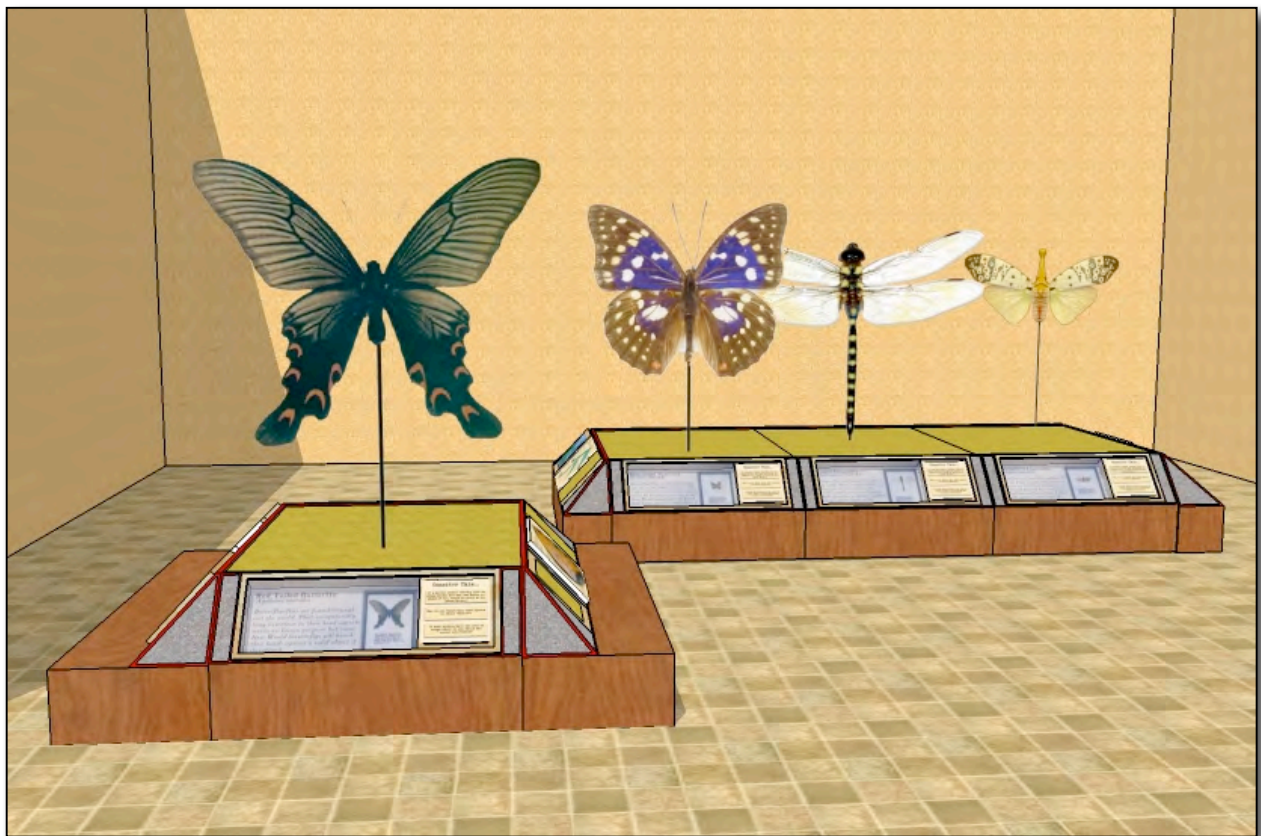


Like many creatures, insects and arthropods adapt and evolve over time to further the survival of their species. Can you guess what those unbelievable long antennae are good for? Or what about the “arms” on the long arm beetle? How could they help that species survive?

Wondrous Wings

We all know that butterflies and moths can have beautiful, colorful wings. You may even know that those wings are covered with tiny scales that make up that color. Each sculpture details the dazzling complexity of wing structure revealing each individually colored scale. How do those colorful scales contribute to the survival of the-species?

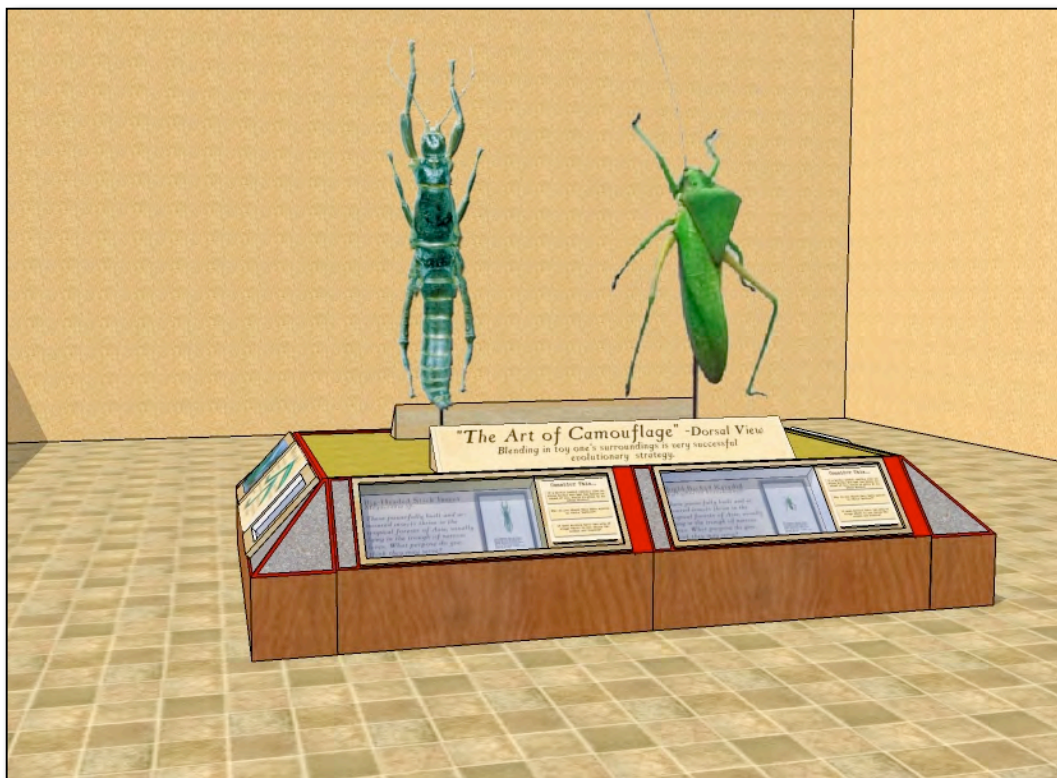
In addition to these colorful wings, many other insect wings are fascinating to discover at a large scale. The membrane of a dragonfly's or lantern insect's wing is more similar than you'd think to those more fanciful butterfly's wings.



Preliminary Design: Wondrous Wings

The Art of Camouflage

One look at a stick insect tells us all we need to know about camouflage – if it can blend in with its surroundings, it might not get eaten. The minute details visible in this large scale reproduction accentuates structures that so convincingly mimics the smallest detail of a tropical leaf. It is a remarkable visual lesson in the power of evolution.

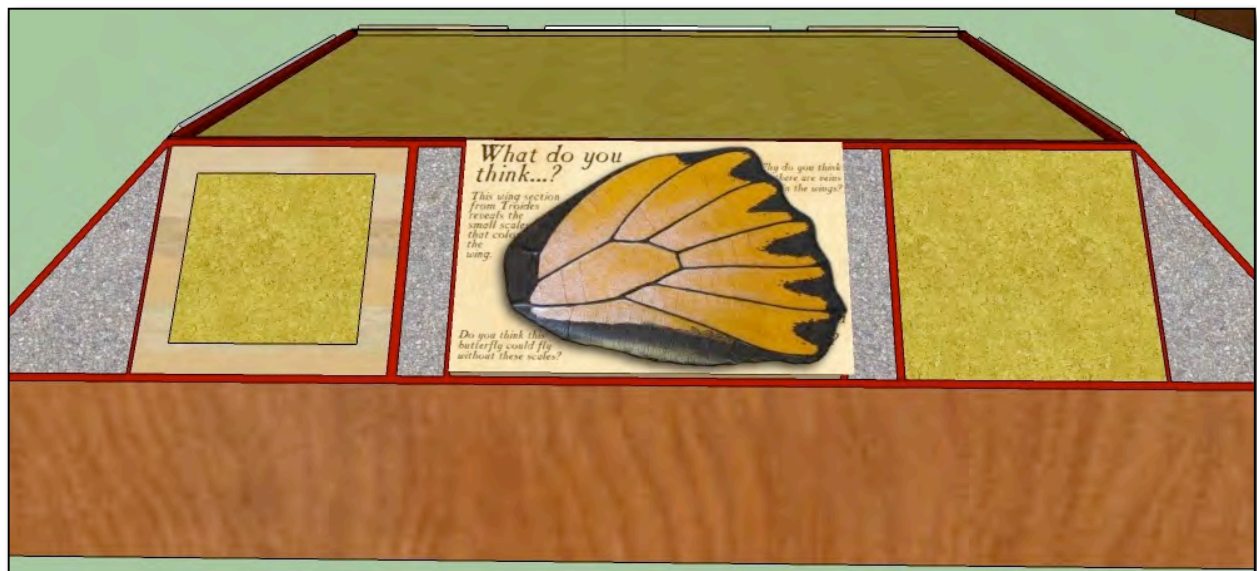


Preliminary Design: The Art of Camouflage

Reading Rail Details: Specimens, Interpretive Information, and Touchable Sculpture Pieces

To compliment the sculptures and interpretive information, embedded within the reading rail component of the viewing platform will be actual mounted specimens of the displayed species (or similar) to show life size. These specimens will be displayed as they might in a specimen drawer in a museum's collection, providing the visitor with the opportunity to compare the enlarged model with the actual animal to discover what lies behind the 'magic door' of scale and perception.

In addition, each reading rail will feature a "Touch Zone", where enlarged insect body parts matching those on display and made of the same material will be affixed and available for touching and manipulating. A dragonfly's compound eye, the huge mandibles of a stag beetle, or a section of a butterfly's scaled wing will be easily accessible for all visitors to explore.



Preliminary Design: Touch Zone

Photo Murals



To further highlight insect collections in museums, photo murals featuring the interiors of typical museum collecting drawers, greatly enlarged, line the gallery walls and serve as an effective backdrop.

About The Artist

The methods used to create the sculptures are almost as fascinating as the models themselves. Lorenzo Possenti is the artist/entomology enthusiast who creates these scientifically accurate works of art. Using powerful magnification and actual specimens of each animal, Lorenzo painstakingly creates each sculpture with remarkable accuracy. A display case with a selection of tools and construction artifacts including original masters, molds, unpainted casts and a photo story of Lorenzo at work in his studio completes the exhibit experience.



Summary

As the visitor exits the gallery, a series of graphic panels provides summative information. Topics Include:

Summary Panel

The Importance of Insects in Museum Collections

TO BE FURTHER DEVELOPED

SPECIFICATIONS

VERSION ONE: TOUR BEGINS FALL 2011

PREMIERE VENUE: The Academy of Natural Sciences

October 22, 2011 – January 16, 2011

Exhibit Size: Approximately 2,500-3,000 square feet; Sixteen Sculptures Total.

Rental Fee: \$30,000 plus one-way shipping. Installation crew available for an additional fee.

2011 Species List	Magnification
<i>Lucanus cervus</i> , stag beetle	20x
<i>Cheirotonus macleayi</i> , long-armed beetle	15x
<i>Aeolesthes oenochrous</i> , long-horn beetle	15x
<i>Dynastes hercules Hercules</i> , Hercules beetle	10x
<i>Dorcus scheklingi</i> , stag beetle	15x
<i>Phyllophorina kotoshoensis</i> , leaf grasshopper	15x
<i>Dorcus formosanus</i> , stag beetle	15x
<i>Megacrania studai</i> , stick insect	15x
<i>Anotogarster sieboldi</i> , jumbo dragonfly	15x
<i>Agehana maraho</i> , red-tailed butterfly	15x
<i>Troides magellanus</i> , pearl butterfly	15x
<i>Sasakia charonda</i> , blue asian butterfly	15x
<i>Atrophaneura horishana</i> , birdwing butterfly	15x
<i>Formotosena seebohmi</i> , giant cicada	15x
<i>Fulgora watanabe</i> , watanabe's lanternfly	15x
<i>Troides aeacus</i> , golden birdwing butterfly	15x



Images Provided for Scale.