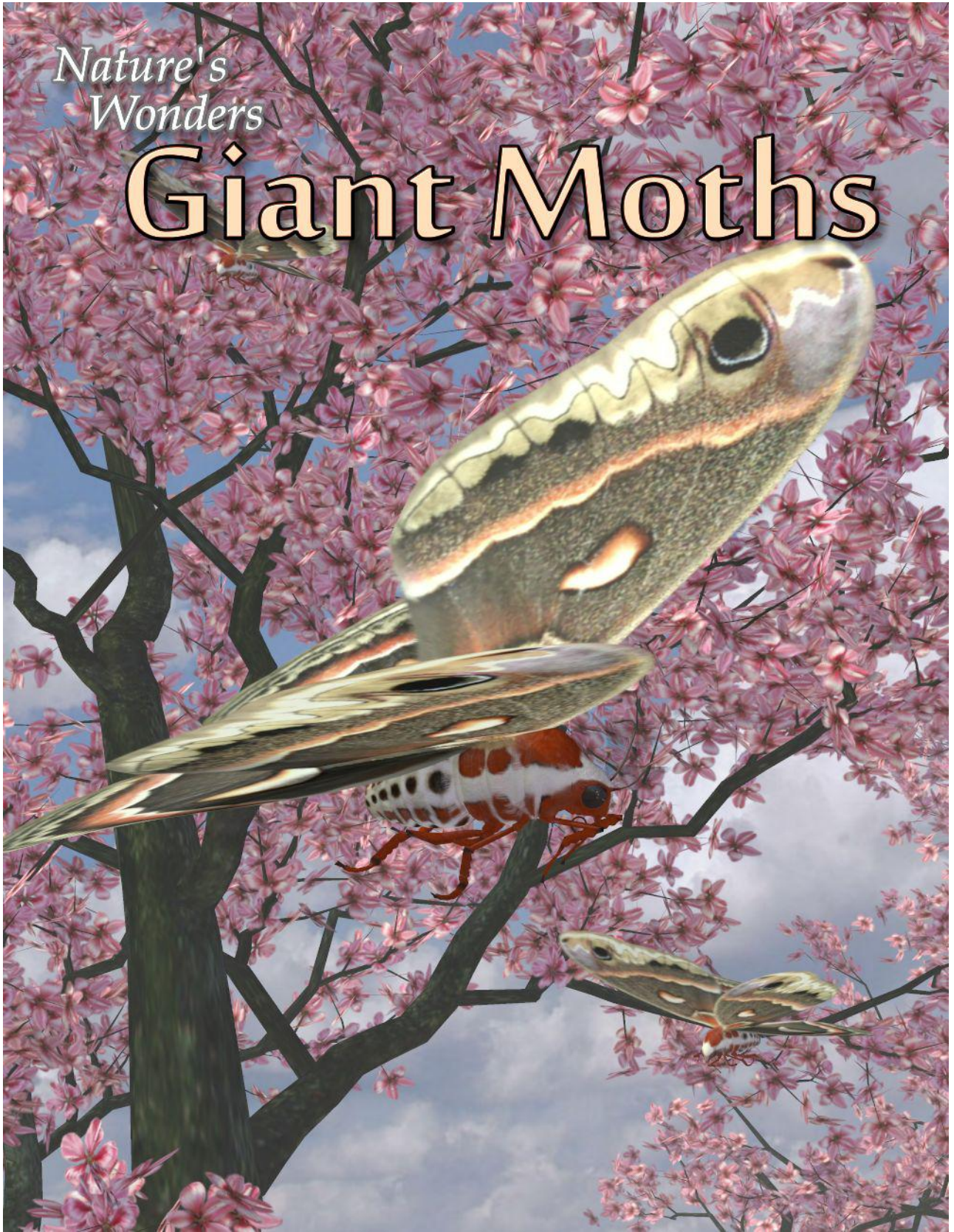


*Nature's
Wonders*

Giant Moths



A 3D Model set by Ken Gilliland

Nature's Wonders

Giant Moths

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Nature's Wonders

Giant Moths

Introduction

Moths comprise a group of insects related to butterflies, belonging to the order Lepidoptera. Most species of moth are nocturnal. Enormous "bird-sized" moths are often called "Giant Moths". This set comprises the four most common of the Giant Moth types; the Silk Moth, the Luna Moth, the Death's Head Moth and the Sphinx Moth.

Overview and Use

This set uses a common model to recreate digitally the moth species included in this volume. Each species uses specific morphs from the generic model to single-out its unique features. Select **Figures** in the Runtime Folder and go to the **Nature's Wonders Insects** folder:

- **Models included in this volume:**
 - **Natures Wonders Moth Base** - This model is used with all moths included in this set.

Creating a Specific Moth using Poser

1. For this example, we'll create the Luna Moth.
2. Load Poser, select the FIGURES library and go to the Nature's Wonders Insect folder.
3. To create a Luna Moth, use the "Nature's Wonders Moth" base model.
4. Go to the POSES library and then to the Nature's Wonders Insect/Giant Moths folder.
5. Select the Luna Moth (or a moth of your choice) and load/apply it to the Moth base model by clicking the mouse. This species pose contains both the morph and texture settings to turn the generic model into the selected moth.
6. If you are using Poser 8, you will also need to turn off Subsurface Scattering [because SSS (Translucency) is not available in Poser 8]. To do this, select the MATERIALS library and go to the Nature's Wonders Insect / Giant Moths / Non-SSS Shaders folder. Apply the Luna Moth material shader to remove Subsurface scattering from the wings so that it will work in Poser 8 correctly. **IMPORTANT:** These alternative material settings apply the textures only. They must be applied **AFTER** the .pz2 pose is applied (Step 5) as this properly shapes the generic moth into the selected species.

Creating a Specific Moth using DAZ Studio

1. For this example, we'll create the Luna Moth.
2. Load DAZ Studio and go to the "Animals" "Nature's Wonders" "Insects" folder.
3. To create a Luna Moth, use the "Nature's Wonders Model" base model.

4. Go to the "Moths of the World" sub-folder and select the Luna Moth (or a moth of your choice) and load/apply it to the Moth base model by clicking the mouse. This species pose contains both the morph and texture settings to turn the generic model into the selected moth. The material settings are tuned for 3Delight rendering.
5. If you plan to render using the Iray renderer, then also apply the iray material settings to the moth. Iray materials are in a sub-folder inside the Moths of the World folder. These materials do not contain the morph settings, so it is important that you apply the default settings in the "Moths of the World" folder *first*.

Sizing & Poser Issues

All the moths included in this set have been scaled to their appropriate sizes in relation to human figure models. In some cases, these moths can be very, very small with a wingspan of around one-inch.

The size of the moths can produce some issues in Poser. The moth may disappear when the camera is in close focus. The "hither" setting on Poser's cameras is set to 0.800 by default. Reducing this setting to "0.0" will correct this issue.

A second issue can appear when rendering a small moth solely (without any other items in the scene). It will produce a default square shadow. It is a known bug with Poser. To correct this issue, include a second larger item off-screen and the shadows will render correctly.

Subsurface scattering does allow some translucency in the moth wings, but does add to render time. Non-Subsurface Scattering shaders have been included in the materials section for Poser users who cannot use SSS (Poser 8 and below) or who prefer not to use this effect. These alternative material settings must be applied **AFTER** the .pz2 (Material/Morph) pose is applied as it properly shapes the generic moth into the selected species.

Cecropia Silk Moth (*Hyalophora cecropia*)

It has a wingspan of up to 6 inches (160 mm). It is found as far west as the Rocky Mountains and north into the majority of the Canadian provinces. The larvae of these moths are most commonly found on maple trees, but they have been known to feed on cherry and birch trees among many others.



Luna Moth (*Actias luna*)

It has a wingspan of up to 114 mm (4.5 in), making it one of the largest moths in North America. This moth is found in North America from east of the Great Plains in the United States to northern Mexico and from Saskatchewan eastward through central Quebec to Nova Scotia in Canada. There have been sightings as far south as central Florida. They are more commonly seen at night. The males are distinguished from the females by their larger and wider antennae. While in their caterpillar stage, their host plants include birch, alder, persimmon, sweetgum, hickory, walnut, sumac and moonflower.



Death's-head Hawkmoth (*Acherontia lachesis*)

It has a wingspan of up to 130 mm (5.1 inches). The skull-like pattern on its back has fostered superstitious fears of the supernatural and evil. The moths' sharp, mouse-like squeaking intensify this perception. It is nocturnal, and very fond of honey; they can mimic the scent of honey bees so that they can enter a hive unharmed to get honey. Their tongue, which is stout and very strong, enables them to pierce the wax cells and suck the honey out. This species occurs throughout almost the entire Oriental region, from India, Pakistan and Nepal to the Philippines, and from southern Japan and the southern Russian Far East to Indonesia, where it attacks colonies of several different honey bee species. It has recently become established on the Hawaiian Islands.



White-lined Sphinx Moth (*Hyles lineata*)

It has a wingspan of up to 50-76 mm (2-3 inches). The moth's range is throughout the United States and extends north into southern and mid western Canada and south into Mexico. Commonly known as the hummingbird moth. This moth's rapid wing movement resembles a hummingbird in flight when it hovers over flowers while it feeds. They may also be seen darting in a back-and-forth pattern over nectar sources, or larval food sources. Host plants include clarkia, epilobium, salvia, vitis, lycopersion, malus, oenothera, ulmus and oenothera.



Special Thanks to...

....my betatesters (FlintHawk)

Species Accuracy and Reference Materials

The author-artist has tried to make these species as accurate to their real life counterparts as possible. Moths of the same species vary considerably, as do all other animals in nature. These moths were created using the correct field markings and the most common similarities.

With the use of one generic model to create dozens of unique moth species, some give and take is bound to occur. In addition, 3D-models have many technical challenges, which make exact representations difficult, if not impossible. It's best to think of these moths represented as resembling the particular species, and they may not, in some cases, be 100% scientifically accurate.

The model and morphs were created using Luxology's Modo. The texture maps were created in Corel's Painter. The model was rigged and materials were created in Smith-Micro's Poser 2014 and DAZ's DAZ Studio.

Internet Sources:

- **Wikipedia** (<http://www.wikipedia.com>)
- **Pacific Northwest Moths** (<http://pnwmoths.biol.wvu.edu/>)
- **Butterflies and Moths of North America** (<http://www.butterfliesandmoths.org>)

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