

Nature's Wonders

Butterflies

of the World Volume 3: Showstoppers

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of the World Volume 3: Showstoppers

Introduction

Butterflies and moths belong to the insect Order Lepidoptera, which is a word that comes from the Greek words for "scale" and "wing." While most of the 150,000 species in this order are moths, there are an estimated 18,000 butterfly species found globally. The earliest known butterfly fossils date to the mid Eocene epoch, between 40–50 million years ago.

Nature's Wonders Butterflies of the World Volume 3 add-on set expands the 3D butterfly world with 8 species of usually marked species, hence the "Showstoppers" subtitle. From the Starry Night Cracker to the richly colored Peacock Butterfly to the crimson colored Eastern Orange Albatross (butterfly) this set will provide centerpieces for your renders.

This set supports Poser's Firefly and Superfly and DAZ Studio 3Delight and Iray render engines.

Overview and Use

The set is located within the **Animals : Nature's Wonder** folder. Here is where you will find a number of folders, such as **Manuals, Resources** and **Fauna Libraries**. Let's look at what is contained in these folders:

- Fauna Libraries: This folder holds the actual species and poses for the "premade" fauna. The fauna for this set can be found in the following folder(s):
 - Insects/Butterflies of the World
- **Manuals:** Contains a link to the online manual for the set.
- **Props:** Contains any props that might be included in the set
- **Resources:** Items in this folder are for creating and customizing your fauna included in the set
 - ... **Based Models:** This folder has the blank, untextured model(s) used in this set. These models are primarily for users who wish to experiment with poses or customize their own species. When using physical renderers such as Iray and Superfly, SubD should be turned to at least "3". For DAZ Studios 3Delight renders, the SubD must be turned from the "High Resolution" setting to the "Base" setting (otherwise some areas will render incorrectly transparent).

Loading a Butterfly using Poser

1. Load Poser, select the FIGURES library and go to the "Animals", "Nature's Wonders" and then the Nature's Wonders Fauna Libraries Insect folder.

2. Go to the Butterflies of the World folder and select the Firefly or Superfly sub-folder.

3. Select a butterfly of your choice and load the model clicking the mouse.

Loading a Butterfly using DAZ Studio

1. Load DAZ Studio and go to the "Animals", "Nature's Wonders" and then the Nature's Wonders Fauna Libraries Insects folder.

2. Go to the Butterflies of the World folder and select the Iray or 3Delight sub-folder.

3. Select a butterfly of your choice and load the model clicking the mouse.

Sizing & Poser Related Issues

All the caterpillars included in this set have been scaled to their appropriate sizes in relation to human figure models. In some cases, these butterflies can be quite small measuring around one-inch.

The size of the butterfly can produce some issues in Poser and 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 butterfly 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 offscreen and the shadows will render correctly.

Posing

The base body part with this model is the "Thorax 1" part. This part, as well as the main body part, control and entire models XYZ Rotate and Transition. There are several Easy Pose chains. One controls the entire abdomen (Abdomen1-5) from the abdomen to tail. There are two other chains; one controling the Proboscis (nectar feeding tube) and one with controls for each individual Antennae.

The Proboscis, by default (0), is fully outstretch for feeding. When not feeding, the "ProboscisBendAll" dial spun to 33 is the normal position.

Butterfly Family Types

Family	Common name	Characteristics	Image
Hedylidae	American moth- butterflies	Small, brown, like geometrid moths; antennae not clubbed; long slim abdomen	
Hesperiidae	Skippers	Small, darting flight; clubs on antennae hooked backwards	
Lycaenidae	Blues, coppers, hairstreaks	Small, brightly colored; often have false heads with eye spots and small tails resembling antennae	
Nymphalidae	Brush-footed or four-footed butterflies	Usually have reduced forelegs, so appear four-legged; often brightly colored	
Papilionidae	Swallowtails	Often have 'tails' on wings; caterpillar generates foul taste with osmeterium organ; pupa supported by silk girdle	
Pieridae	Whites and allies	Mostly white, yellow or orange; some serious pests of <i>Brassica</i> ; pupa supported by silk girdle	
Riodinidae	Metalmarks	Often have metallic spots on wings; often conspicuously colored with black, orange and blue	No image available

Blue Morpho (Morpho peleides)

The Blue Morpho is a species known for its bright blue wings with a black edge. This species is one of the larger butterfly species in the world, with wings spanning 3.0–7.9 inches (7.5–20 cm). This butterfly species has tiny scales on its dorsal side of the wings which reflect light, giving it a glowing blue shade. The ventral of the wings have a dull brown color with many eyespots. These eyespots act as camouflage to hide the butterfly from predators, such as birds and insects, when its wings are closed. Only male blue morphos display the characteristic shimmering blue wings over the entire surface. The females are brown with smaller areas of blue interspersed.

Where is it found: It found in Mexico, Central America, northern South America, Paraguay and Trinidad.



Diet: Nectar from plants; this includes phlox, azaleas, thistles, fruit trees, zinnias, ironweed, goldenrod, coneflower, buttonbush, asters, blazing star, red clover, monarda and jewelweed.

Threats: Climate change could pose a serious threats to this species.

Other Notes:The most remarkable thing about blue morpho butterflies may be that glittery blue on top of their wings. That beautiful blue is actually kind of an illusion. It's not really blue at all! There are microscopic ridges on their wing scales that catch the light and reflect blue.

Eastern Orange Albatross (Appias zarinda)

It has been also called the "Flame Albatross". The dorsal wings are a bright orange with hints of black in veins. The ventral side is similar but paler. It has a wingspan of 2.1-2.3 inches (5.5-6 cm)

Where is it found: It is found on the Sulawesi and the Maluku Islands of Indonesia.

Ventral Ventral

Diet: Nectar from plants.

Threats: Climate change could pose a serious threats to this species.

Other Notes: There are four subspecies:

- *A. z. zarinda*. First reported by Boisduval in 1836. The nominate race is found in Sulawesi, Kabaena, Tukangbesi Islands, and on Peleng Island (the Banggai Islands).
- A. z. bouruensis. First reported by Wallace in 1867. It is found in Buru.
- *A. z. phestus.* First reported by Westwood in 1888. It is found in the Sangihe Islands and the Talise Islands.
- *A. z. sulana.* First reported by Fruhstorfer in 1899. It is found on Mangole Island (the Sula Islands).

Leafwing Butterfly (Agrias narcissus)

This species have a pattern of very bright red, orange, shimmering blue, and yellow colors on the black or bluish background of the dorsal side of their wings. The ventral sides of the wings are patterned. They have a broad thorax and short wide abdomen which makes faster flight possible. The wingspan of these butterflies ranges from 2.7-4.7 inches (7–12 cm).

Where is it found: It found in South America, from French Guiana to Brazil in the northern Amazon region.



Diet: Adults feed on fermented fruits, vegetables exudates and animal excrement. Host plants for caterpillars include Euphorbiacea, Fabaceae, Mimosaceae, Lauraceae, Annonaceae, Piperaceae, Erythroxylaceae, Convolvulaceae, Monimiaceae and Quiinaceae

Threats: Climate change, habitat destruction and over-collection could pose serious threats to this species.

Other Notes: There are multiple subspecies:

- *A. g. narcissus.* First reported by Otto Staudinger in 1856.
- A. g. chrysotaenia. First reported by G. Seraphin by 2022. Endemic to Manaus (rio Urubu, Lindoia). Yellow females are characterized by an oblique band positioned higher and significantly wider. Males are red and show no difference from the nominate.
- *A. g. christinae.* First reported by G. Seraphin by 2022. Endemic to Obidos, Brazil.

Red Tip (Colotis antevippe)

This species has a wingspan of 1.57–1.77 inches (4–4.5 cm). It has pure white dorsal sides with yellow, orange, or red tips on the forewings.

Where is it found: Mostly, this species is found in the continent of Africa, scattered from Gambia to Ethiopia and south to Angola, Namibia, Mozambique, and South Africa. It also occurs in southwestern Arabia.

This species inhabits savanna, Acacia scrub and large clearings in dry woodland.



Ventral

Dorsal

Diet: Nectar from plants. The larval foodplants include Maerua, Capparis, Boscia, Cabada and Ritchiea.

Threats: Climate change, habitat destruction and over-collection could pose serious threats to this species.

Other Notes: It is migratory in behaviour, and will fly long distances to seek new breeding areas when the dry season sets in. In sunny weather the butterflies are very active and rarely settle for long, but they can be found basking among the grasses or on bushes, early or late in the day when temperatures are lower.

Rippon's Birdwing (*Troides hypolitus*)

The wingspan of this species ranges from 7–7.8 inches (18–20 cm). Although males are mostly black in color, gray colors and golden spots may be seen on the hindwings. Female adult butterflies are larger in size and are mostly dark brown in color.

Where is it found: It found throughout the Australasia and Indomalayan regions, primarily the Indonesian Islands of the Moluccas and Sulawesi.

Diet: Nectar from plants.



Threats: Climate change, habitat destruction and over-collection pose serious threats to this species. It is a protected species and listed in the appendix II from CITES.

Other Notes: In Greek mythology, Hippolytus, was the son of Theseus.

There are four subspecies:

- *T. h. hypolitus*. First reported by Pieter Cramer in 1775. The nominate subspecies is endemic to the Moluccas.
- *T. h. antiope*. First reported by Rothschild in 1908. It is found on Morotai.
- *T. h. cellularis.* First reported by Rothschild in 1895. It is found in Sulawesi, Talaud.
- *T. h. sulaensis.* First reported by Staudinger in 1895. It is found on the Sula Islands.

Starry Night Cracker (Hamadryas laodamia)

It gets its name from its resemblance to a miniature representation of the night sky. It is black, like the nighttime sky, and has tiny blue specks which resemble stars. The female has a white band on the dorsal side of the forewing that is broader than the band on the male. The wingspan is about 2.8 inches (7 cm).

Where is it found: It can be found from Mexico to the Amazon basin, but is most common in lowland forest in the Caribbean area.

It occurs at altitudes of up to 900 m (3,000 ft) on both the Pacific and Atlantic slopes of the Andes Ranges, but it is at its most common in lowland forests in the Caribbean region where it inhabits the mid and upper parts of the canopy.



Diet: The larvae of the starry night cracker feed on the leaves of the *Dalechampia triphylla* vine. This butterfly exhibits aposematic coloring and is avoided by birds such as jacamars. It appears that the larvae of the starry night cracker store up distasteful toxic chemicals from the leaves, and the jacamars learn to avoid the vividly colored adult butterflies.

The adult butterflies do not visit flowers, instead obtaining their nourishment by sucking the juices from rotting fruit. Like their well-camouflaged relatives, starry night crackers like to rest head-downward on the trunks of trees with their wings flattened against the bark.

Threats: Climate change, habitat destruction and over-collection could pose serious threats to this species. It is a protected species.

Other Notes: The word "cracker" comes from the cracking sound that the males make when they take off.

Peacock Butterfly (Aglais io)

It is considered one of the most beautiful butterfly species in the world. The upper part of its wings is rusty red that is bordered by either black or gray and has eyespots with a combination of the hues blue, white, red, yellow, and violet while the underside of the wings is a mixture of black or brown. Its name comes from the eyespots that resemble those on peacock feathers. The eyespots act as a protective mechanism to ward off potential predators. When threatened, the peacock butterfly expands its wings, showing what appears to be "eyes" that resemble those of larger creatures.

The brown-colored bottom serves as camouflage. The Peacock Butterfly prefers to lie down with its wings closed, exposing its brown underside and blending in with brown vegetation like dried leaves and branches as well as soil to prevent enemies from spotting this delicate creature. This species has another defense mechanism against predators in addition to that. If its coloring defense fails, this butterfly makes a hissing noise by rubbing and flapping its wings which scares predators and enables safe escape.

It has a 2-2.2 inch wingspan (5-5.5 cm).



Ventral

Dorsal

Where is it found: It found throughout Europe and temperate Asia as far east as Japan. It is resident in much of its range, often wintering in buildings or trees, and often appears quite early in spring.

Diet: Nectar from plants. Their caterpillars feed exclusively on Urtica (stinging nettle).

Threats: Climate change, habitat destruction and over-collection could pose serious threats to this species. It is a protected species.

Other Notes: There are three subspecies:

- *A. i. io.* First reported by Linnaeus in 1758. The nominate subspecies in endemic to Europe and temperate Asia.
- *A. i. caucasica.* First reported by Jachontov, 1912. It is found in Azerbaijan.
- *A. i. geisha.* First reported by Stichel in 1908. It is found in Japan and the Russian Far East.

Clipper Butterfly (Parthenos sylvia)

The upper wings of the butterfly are mostly black with patterned dots and stripes; the forewings have noticeable white spots. Similar markings can be seen on the ventral side, although it is paler. The average wingspan of Clipper Butterflies is 8.8 cm (3.5 in).

Where is it found: It found in Sri Lanka, India, Myanmar, Thailand, Malaysia, Borneo, the Philippines, Indonesia, and Papua New Guinea.



Diet: They prefer tiny flowers, and lantana plants are their first choice for nectar sources. They also have been observed mud-puddling in order to drink mineral-rich water accumulated on the soil

Threats: Climate change, habitat destruction and over-collection could pose serious threats to this species.

Other Notes: Because they are cold-blooded, they prefer to rest in a place with natural heat, such as sunlight, to warm their bodies. When their temperature is too low, they are unable to fly or feed. There are more than 25 subspecies of Clipper Butterflies, and depending on the geographic area in which they are distributed, the wings are tinted with different hues, from green to blue to brown to yellow.

There are multiple subspecies:

• *P. s. admiralia*. First reported by Rothschild in 1915.

- *P. s. apicalis*. First reported by Moore in 1878.
- *P. s. aruana*. First reported by Moore in 1897.
- *P. s. bandana*. First reported by Fruhstorfer in 1899.
- P. s. bellimontis. First reported by Fruhstorfer in 1899.
- *P. s. borneensis.* First reported by Staudinger in 1889.
- P. s. brunnea. First reported by Staudinger, 1888
- *P. s. couppei.* First reported by Ribbe in 1898.
- P. s. cyaneus. First reported by Moore in 1877.
- P. s. ellina. First reported by Fruhstorfer in 1899.
- P. s. gambrisius. First reported by Fabricius in 1787.
- *P. s. guineensis*. First reported by Fruhstorfer in 1899.
- *P. s. joloensis.* First reported by Fruhstorfer in 1899
- *P. s. lilacinus.* First reported by Butler in 1879. This subspecies is commonly called the "Blue Clipper".
- P. s. nadiae. First reported by Casteleyn in 2020.
- P. s. nodrica. First reported by Boisduval in 1832.
- P. s. numita. First reported by Fruhstorfer.
- P. s. obiana. First reported by Fruhstorfer in 1904.
- *P. s. pherekrates.* First reported by Fruhstorfer in 1904.
- *P. s. pherekides.* First reported by Fruhstorfer in 1904.
- *P. s. philippinensis.* First reported by Fruhstorfer in 1899. This subspecies is known as the "Brown Clipper".
- P. s. roepstorfii. First reported by Moore in 1897.
- *P. s. salentia.* First reported by Hopffer in 1874.
- *P. s. silvicola*. First reported by Fruhstorfer in 1897.
- *P. s. sulana.* First reported by Fruhstorfer in 1899.
- *P. s. sumatrensis.* First reported by Fruhstorfer in 1899.
- P. s. sylla. First reported by Donovan in 1798.
- *P. s. sylvia.* First reported by Cramer in 1776. This is the nominate subspecies.
- P. s. theriotes. First reported by Fruhstorfer,
- P. s. thesaurinus. First reported by Grose-Smith in 1897,
- P. s. thesaurus. First reported by Mathew in 1887.
- P. s. tualensis. First reported by Fruhstorfer in 1899.
- *P. s. ugiensis.* First reported by Fruhstorfer.
- *P. s. virens*. First reported by Moore in 1877.

Special Thanks to my Beta-Testing Team...

Alisa & FlintHawk

Species Accuracy and Reference Materials

The author has tried to make these species as accurate to their real life counterparts as possible. With the use of one generic model to create dozens of unique species, some give and take is bound to occur. The texture maps were created in Corel Painter with as much accuracy as possible.

Field Guide Sources:

- Wikipedia https://en.wikipedia.org/wiki/Main_Page
- Cambridge Butterfly Conservatory https://www.cambridgebutterfly.com
- Butterfly Conservation https://butterfly-conservation.org
- US Fish and Wildlife <u>https://www.fws.gov</u>
- What's That Bug https://www.whatsthatbug.com
- Butterflies at Home https://www.butterfliesathome.com

