

# FIELD GUIDE



FRED & DOROTHY FICHTER  
**BUTTERFLIES  
ARE BLOOMING**  
at **MEIJER** GARDENS

## WELCOME

Thank you for visiting *Fred & Dorothy Fichter Butterflies Are Blooming* at Frederik Meijer Gardens & Sculpture Park.

This guide provides you with a basis of knowledge that will enhance your experience and have you on your way to being a butterfly expert!

Thousands of butterflies will be flying in the Lena Meijer Tropical Conservatory over the course of the exhibition. How many will you see?

## BUTTERFLY VESTIBULE

Due to USDA-APHIS-PPQ regulations: No plant, animal, or insect may be brought into or out of the Lena Meijer Tropical Conservatory. For this reason, guests must pass through a vestibule upon entering and exiting the conservatory. Before leaving, please check yourself for hitchhiking butterflies. A vestibule volunteer will carefully remove them for you.

## PLEASE NOTE

**Do not touch the butterflies.** Did you know? A butterfly's wings are covered in fragile microscopic scales, overlapping like roof shingles—often 200 to 600 per square millimeter! A butterfly's feet are sensitive as well: Did you know most of a butterfly's taste buds are on their feet?



**False Zebra Longwing**  
*Heliconius atthis*

# BUTTERFLY SPECIES INDEX

Over 60 species of butterflies and moths may be found throughout the Lena Meijer Tropical Conservatory during March and April each year.

The index on the following pages includes *Butterflies Are Blooming's* most commonly seen species, yet you may see others too.

## CENTRAL & SOUTH AMERICA



**Grecian Shoemaker**  
*Catonephele numilia*



**Zebra Mosaic**  
*Colobura dirce*



**Costa Rica Clearwing**  
*Greta oto*



**Grey Cracker**  
*Hamadryas feronia*



**Julia**  
*Dryas iulia*



**Blue and White Longwing**  
*Heliconius cydno*



**False Zebra Longwing**  
*Heliconius atthis*



**Zebra Longwing**  
*Heliconius charitonius*



**Doris Longwing**  
*Heliconius doris*



**Golden Helicon**  
*Heliconius hecale*



**Tiger Longwing**  
*Heliconius ismenius*



**Postman**  
*Heliconius melpomene aglaope*



**Postman**

*Heliconius melpomene cythera f. sticheli*



**Postman**

*Heliconius melpomene plesseni*



**Postman**

*Heliconius melpomene*



**Ruby-Spotted Swallowtail**

*Heraclides anchisiades*



**Common Morpho**

*Morpho peleides*



**Whitened Bluewing**

*Myscelia cyaniris*



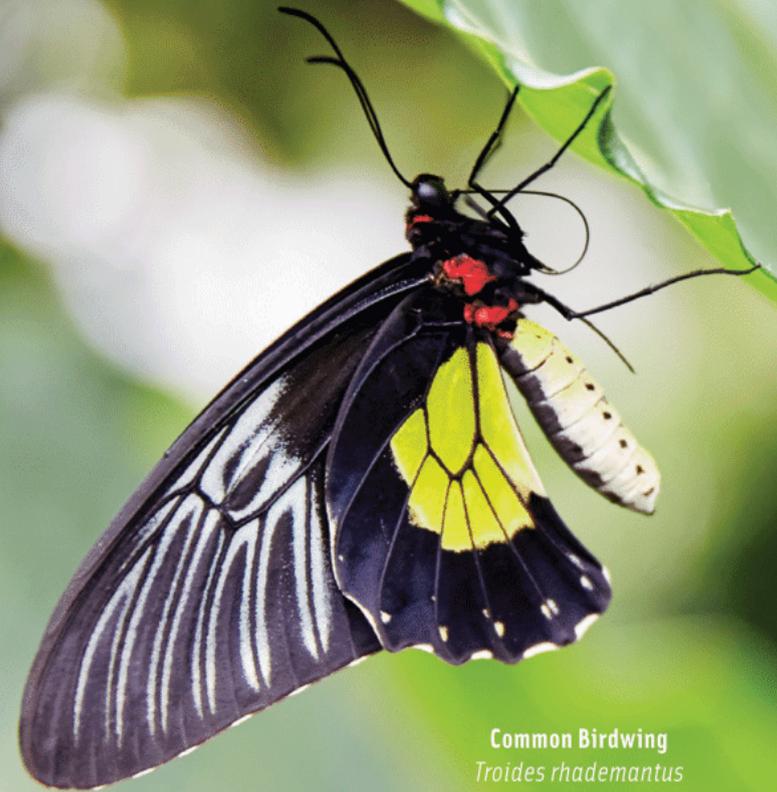
**Arched-wing Cattleheart**

*Parides arcas*



**Pink Cattleheart**

*Parides iphidamas*



**Common Birdwing**

*Troides rhademantus*

## AFRICA



**Emperor Swallowtail**  
*Papilio ophidicephalus*



**Blue-Banded Swallowtail**  
*Papilio nireus*



**African White Swallowtail**  
*Graphium angolanus*



**African Moon Moth**  
*Aregema mimosae*



**Orchard Swallowtail**  
*Papilio demodocus*



**Pearl Charaxes**  
*Charaxes varanes*

## ASIA



**Leopard Lacewing**  
*Cethosia cyane*



**Great Orange Tip**  
*Hebomoia glaucippe*



**Tree Nymph**  
*Idea leuconoe*



**Great Yellow Mormon**  
*Papilio lowii*



**Great Mormon**  
*Papilio memnon*



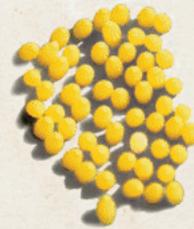
**Blue Clipper**  
*Parthenos sylvia lilacinus*



**Tree Nymph**  
*Idea leuconoe*

## LIFE CYCLE

The tree nymph, like all butterflies and moths, undergoes complete metamorphosis. This butterfly starts its life as an egg. After hatching, the tiny caterpillar will eat until it is almost 3,000 times the size it was when it hatched! The caterpillar will then become a chrysalis and, after a few weeks, emerges as a beautiful butterfly.



**Eggs**



**Caterpillar**



**Chrysalis**



**Adult**

What happens after a butterfly emerges from its chrysalis? Butterflies can't fly when they first emerge. They must pump fluid into their wings and allow them to expand before they can take their first flight. When the butterflies in our exhibition are ready to fly, trained staff carefully move them into a release box and set them free into the Lena Meijer Tropical Conservatory.

## WHY THESE WINGS?

The wings of butterflies and moths aren't just beautiful: Their patterns and colors give them advantages that help them survive in the wild. Distinct colors, shapes and patterns also help butterflies recognize one another.

### CAMOUFLAGE

Many insects blend into their surroundings. The transparent wings of the clearwing butterfly provide camouflage by nearly disappearing into their surroundings. Rothschild moths' markings provide camouflage against bark and leaves. The almost transparent "windows" break up their wide wingspread, making them appear smaller. This moth belongs to the silk moth family (*Saturniidae*), which contains some of the largest moths in the world. Blending in is important to help them stay hidden from predators.



### WARN

Some butterflies want to be seen. Their hard-to-miss markings warn other animals that they are distasteful. Postman butterflies' bright red markings warn predators that they taste terrible!

### CONFUSE

The unique wings of some butterflies make them tricky for predators to catch, find or follow. Many swallowtails have "tails" on their hindwings. A hungry animal might mistake a "tail" for a head and strike the butterfly's back, allowing it to escape. Eyespots on the underside of a morpho's wings confuse predators, who might think they are looking at another animal. Often located along the edges of the wings, eyespot patterns direct predators to strike away from the vulnerable body. Bright blue on the upper surface of their wings helps flying morphos flash in and out of a predator's view.

## BUTTERFLY vs. MOTH

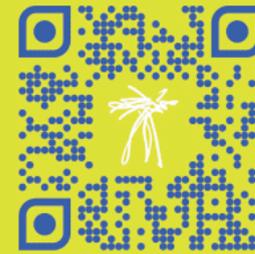
**When is it active?** Butterflies are typically active during the day, while moths are typically active at night. The giant silk moths are sedentary during the day and fly in the dark. They are so well camouflaged that if they were let loose in the Lena Meijer Tropical Conservatory, they would be very difficult to find! Look for these moths in the Observation Station.

**What do the antennae look like?** Butterflies usually have clubbed antennae, while moth antennae are feathery or filamentous.



**Chrysalis vs. Cocoon:** A butterfly caterpillar forms a chrysalis while a silk moth caterpillar spins a cocoon. Both offer protection during the transformation into an adult butterfly or moth. Check out the Observation Station to see an array of chrysalides and cocoons.

## A True Global Journey



Learn more about the largest temporary tropical butterfly exhibition in the United States and our related programming and events.

**SPONSORS:** *Fred & Dorothy Fichter Butterflies Are Blooming* is made possible by Fred & Dorothy Fichter and family; Howard Miller Company; The Meijer Foundation; Frederik Meijer Gardens & Sculpture Foundation; Botanic and Sculpture Societies of Frederik Meijer Gardens & Sculpture Park; Michigan Council for the Arts, a partner agency of the National Endowment for the Arts; and Merrell. Media sponsors are Star 105.7 FM, WOOD-TV8 and Blue Lake Public Radio.



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Gardens & Sculpture Park