How a caterpillar turns into a butterfly?

Butterflies are part of the class of insects in the order Lepidoptera. A butterfly has to go through a four-stage life cycle, egg, caterpillar, pupa and adult butterfly, to turn into an adult butterfly with beautiful and large wings. The process take a month to year, depending on the type of butterfly. There are about 24,000 species of butterflies in the world.

The First Stage: The Egg

A butterfly starts its life as an egg, which is laid by a female butterfly. Butterfly eggs come in many shapes (spherical, oval, and pod-shaped) and colors (white, green, yellow), depending on the type of butterflies. Butterfly eggs are very small – only about the size of a pinhead. A female butterfly lays a lot of eggs close together at a time on leaves that caterpillars like to eat. This is to make sure at least some of them survive.

Each egg contains a tiny worm-like creature, caterpillar, growing inside the egg. About three to five days after the eggs are laid, the caterpillars will hatch from the egg.

The Second Stage: Caterpillar

Caterpillars are long, worm-like creatures, which can turn into butterflies after two more stages. They often have some colorful pattern of stripes or patches.

The only thing a caterpillar can do to prepare itself to a butterfly is to eat. It needs to eat a lot on this stage to grow up and store food for its later stages. It is very important that the mother butterfly lays her eggs on the type of lead that the caterpillar will eat, because the caterpillar is too small and weak that it can only eat the leaf that it was born onto. As it eats more and more, it will grow bigger. Caterpillars can grow 100 times their size.

The Third Stage: Pupa

In the pupa stage (chrysalis stage), the caterpillar is done growing. They have already reached their full length and weight. They find a safe place for themselves, usually under a branch, and form themselves into a pupa. The pupa is often the same color as objects around it, which protect the pupa from other animals.

The caterpillar rests and changes rapidly in this stage. It is the stage that the caterpillar grows its legs, wings, eyes, and other parts of an adult butterflies. This stage lasts from a few weeks to a month or even longer.

The Fourth Stage: Adult Butterfly

In the last stage, a butterfly comes out from the pupa. It is very colorful and looks very different than a caterpillar.

When the butterfly first comes out, its wings are damp. They are soft and folder against the butterfly's body. The butterfly is very tired after the pupa stage. Therefore it needs some time to rest and dry its wings. After a short break, the butterfly starts to pump blood into its wings and fly. It flies to look for food and a male butterfly. After it finds a male and lies on leaves, the butterfly life cycle will start over.

> Source: the butterfly site J464/Aishan Guo