Butterflies (**Rhopalocera**) are <u>insects</u> that have large, often brightly coloured wings, and a conspicuous, fluttering flight. The group comprises the <u>superfamilies Hedyloidea</u> (moth-butterflies in the Americas) and <u>Papilionoidea</u>. Butterfly fossils have been dated to the <u>Paleocene</u>, about 56 million years ago. [citation needed]

Butterflies have a four-stage <u>life cycle</u>, as like most insects they undergo <u>complete</u> <u>metamorphosis</u>. Winged adults lay eggs on the food plant on which their <u>larvae</u>, known as <u>caterpillars</u>, will feed. The caterpillars grow, sometimes very rapidly, and when fully developed, <u>pupate</u> in a <u>chrysalis</u>. When <u>metamorphosis</u> is complete, the pupal skin splits, the adult insect climbs out, expands its wings to dry, and flies off.

Some butterflies, especially in the tropics, have several generations in a year, while others have a single generation, and a few in cold locations may take several years to pass through their entire life cycle. [citation needed]

Butterflies are often polymorphic, and many species make use of camouflage, mimicry, and aposematism to evade their predators. Some, like the monarch and the painted lady, migrate over long distances. Many butterflies are attacked by parasites or parasites or parasitoids, including masps, protozoans, flies, and other invertebrates, or are preyed upon by other organisms. Some species are pests because in their larval stages they can damage domestic crops or trees; other species are agents of pollination of some plants. Larvae of a few butterflies (e.g., harvesters) eat harmful insects, and a few are predators of ants, while others live as mutualists in association with ants. Culturally, butterflies are a popular motif in the visual and literary arts. The Smithsonian Institution says "butterflies are certainly one of the most appealing creatures in nature". [2]

