

## Butterflies in the Cloud Forest

Cloudbridge Nature Reserve - Nature Notes No. 12

### Life of a Butterfly

All butterflies go through four distinct stages in their lives. Adult female butterflies will select plants to lay their eggs on that will provide food to the caterpillars. Once the eggs are laid, they will usually hatch within one week. The voracious caterpillar that emerges will spend most of its time eating and growing. When the caterpillar has grown to full size (about 2-3 weeks) it attaches itself to a support and metamorphoses into a chrysalis. An adult butterfly will emerge in 1-2 weeks. The adult butterfly, emerging from the chrysalis will bask in the sunshine to harden and set its wings, and begin its very short, but beautiful life. Most adult butterflies live only 10-20 days, some no more than a few days.



### Butterflies in the Mud

Butterflies like to hang out around mud puddles, wet sand and gravel areas. Here they will congregate and absorb the water and salts. The mud puddles provide minerals that some species of butterfly need and do not receive from nectar-rich plants. They are also attracted by sweat from humans and animals - see below.

### Butterfly Defenses

Butterflies make juicy meals for birds and other predators. Like other animals with very short life spans, they evolve quickly, and natural selection has given them effective strategies to survive and procreate. Their random flying pattern is thought to have developed to enable them to escape a mid-air attack by a faster, but less manoeuvrable bird. Some butterflies are toxic, and they advertise it with bright wing patterns example: the orange-and-black Monarch). Birds avoid these. Some palatable butterflies have wing coloration that mimic the bad-tasting ones. (Batesian mimicry). Others have developed unusually strong wing muscles, so that they can accelerate much faster than birds.



### Butterflies in Costa Rica

Butterflies and moths belong to the order Lepidoptera. In Costa Rica, there are an estimated 13,500 species of Lepidoptera. They are good environmental indicators. Studies have shown that when rainforests are destroyed, or local temperatures rise, or chemicals and pesticides contaminate our environment, or natural habitats are lost, it is almost always the butterfly that suffers most.