



Adaptations in butterfly and moth caterpillars

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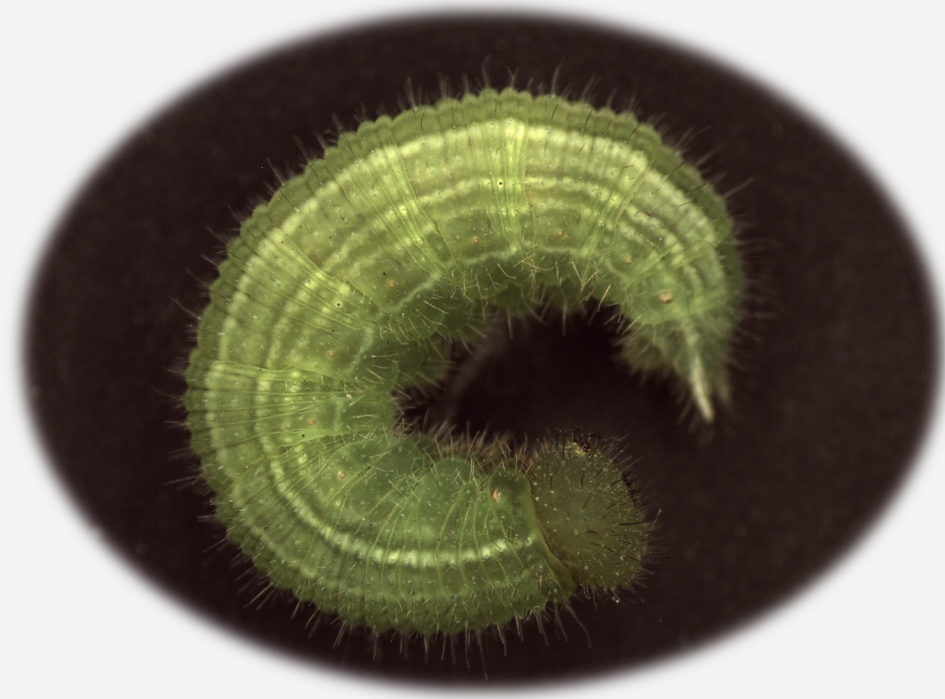
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- A caterpillar hatches from an egg laid by an adult moth or butterfly
- Caterpillars are the second stage of the butterfly/moth life cycle
- Each type of caterpillar will turn into a specific kind of adult butterfly or moth
- Caterpillars eat a lot, so that they can survive and reach the next stages of the life cycle
- Many animals eat butterfly and moth caterpillars
- This makes caterpillars an important part of the food chain in the habitats in which they live



Eggs and caterpillars on grass plants

- Caterpillars have special skills to cope with their environment
- These special skills are called **adaptations**
- Adaptations can be:
 - ❖ physical changes to the caterpillar's body
 - ❖ behavioural changes in how a caterpillar does things
 - ❖ changes in the way that the caterpillar moves around where it lives



Physical changes to the caterpillar's body

- Different types of caterpillars can have very different body shapes and sizes
- Some of these differences in the caterpillar's bodies are adaptations to try to stop the caterpillar from being eaten by predators
- Some examples known to help protect caterpillars from bird predators are:
 - ❖ Camouflage
 - ❖ Disguise
 - ❖ Warning colouration or patterns
 - ❖ Decorations e.g. spikes



Warning coloration



Spikes

Behavioural changes in how a caterpillar does things

- Some types of caterpillars have changed the way they behave to try to make it harder for predators to find and eat them
- These are called behavioural adaptations
- Some examples of behavioural adaptations seen in caterpillars are:
 - ❖ Hiding underneath leaves, or at the bottom of plants
 - ❖ Feeding only at night time
 - ❖ Escape behaviour
 - ❖ Living in large groups and covering themselves with large silken webs
 - ❖ Living inside leaves



Living in silken webs



Living inside leaves

Moving around where they live

- Moving around is dangerous for caterpillars
- Caterpillars have soft bodies without skeletons to help them move
- ❖ This means that it takes a lot of energy for them to move about, making it hard work to search for new plants to eat



Moving over large distances

- Some types of caterpillars live in large family groups
- ❖ Their food can run out quickly, and these caterpillars need to move to find new plants to eat
- ❖ To do this, they use a behaviour called ballooning – using silken threads to blow away in the wind



Using silken threads to move