

St Colmcille's

BUTTERFLY

GARDEN

FACTFILE

Creating a Butterfly Garden

- Include "host plants" for the eggs
- ⌚ Choose appropriate plants
- ⌚ Be sure to include plants that bloom at different times of the year
- ⌚ Make sure there's a lot of colour
- ⌚ Water is necessary for life

ALL WELCOME TO EXPLORE OUR GARDEN. YOU WILL FIND BUTTERFLY EGGS, CATERPILLARS, PUPA/CHRYSAEALIS AND ADULT BUTTERFLIES FEEDING.



The female butterfly works very hard to ensure the survival of her species. Have you ever witnessed a female butterfly flirting with a bush or a tree? You may have seen her playing the field as she moves from branch to branch touching or drumming the leaves with her forelegs. She is testing the plant with sensory hairs on her foot to see if it is a worthy host.



EGG HUNT

A typical egg develops in 3-10 days, an eternity for an immobile pinhead. About the only natural defenses butterfly eggs have are colour and camouflage. A green egg on a green leaf is invisible, a brown egg becomes a speck of dirt, bright red or yellow displayed says "Go away! I don't taste good!"

On average a female butterfly may visit up to 10 prospective host plants before picking the perfect one. Even after she has made her choice, she may spend up to 9 hours surveying and selecting precise leaves on which to deposit her eggs.

To predators, such as wasps, flies, beetles and ants, the egg is a tempting little packet of nutrients just waiting to be eaten. Parasitic wasps find these tiny tots especially irresistible as they provide the perfect place to burrow their eggs.

Caterpillar



Most often, when an egg begins to darken in color, a caterpillar is ready to emerge. Just the size of a dash or a comma, this tiny crawler enters the world by eating its way out of its shell.



With all major body parts intact from the onset, this miniature muncher is ready and able to do what it does best. Eat! With a hardened head full of mandibles or primitive teeth, 6 simple eyes, usually located by the mouth (where they are most needed) and 8 pairs of legs (3 pairs of true legs & 5 pairs of false or velcro type prolegs), a caterpillar is equipped with all it needs to be the “Voracious Eating Machine” that Mother Nature intended

In many cases, caterpillars are protected by ants. This is a unique relationship where, in exchange for a sugary secretion, which the caterpillar produces, the ants provide protection from predators and in some situations they also offer shelter for eggs and chrysalises



Some caterpillars choose to look like a vein in a leaf, while others go for the bird-dropping look. Better yet, why not fool your audience entirely by making them think you are a green snake with large daunting eyes, and then pop out orange glands, which emits a fool odor. Whatever your method, hopefully your show will be a success and the threatening predator will depart.





There are usually 5 stages or “instars” at which the caterpillar must shed an outer layer of skin or “exoskeleton” in order to compensate for its increasing body size.

They do this molting by taking in gulps of air, then puffing out, which causes the old skin to split at a designated seam allowing the new and improved caterpillar to crawl out.

Caterpillars are truly magicians, crawling illusions. By the last instar or shedding, the caterpillar is ready to perform its final trick, to transform entirely and take on the new identity of a chrysalis. . .



Butterfly

Breaths of air are taken in and a chrysalis cracks open. Out steps a newly emerged butterfly. Its wings are wet and crumpled, but soon they will begin to be pumped out and then dried. The butterfly will be free to fly off into a different dimension.

This new world contains many of the same dangers that the old one did, perhaps even more, but the butterfly is now armed with a new and improved body. It has...

- Six legs and a set of wings, which can fly.
- Compound eyes, which can see in every colour and in every direction.
- An antennae, which can smell extremely efficiently.
- Feet which taste and a built in straw or proboscis (*pro-boss-kiss*) which can be used to drink up sweet nectar

On their wings butterflies also flaunt a lovely mosaic of scales. These scales are most important for many reasons. They absorb heat which helps to enable the butterflies to fly. They may also help a butterfly escape a sticky situation, such as a spider web, as they flake off quickly and make for an easy escape. But most importantly, they help the butterfly to converse or “Wing Talk”. Communicating with friends and foe alike is something a butterfly must do often.

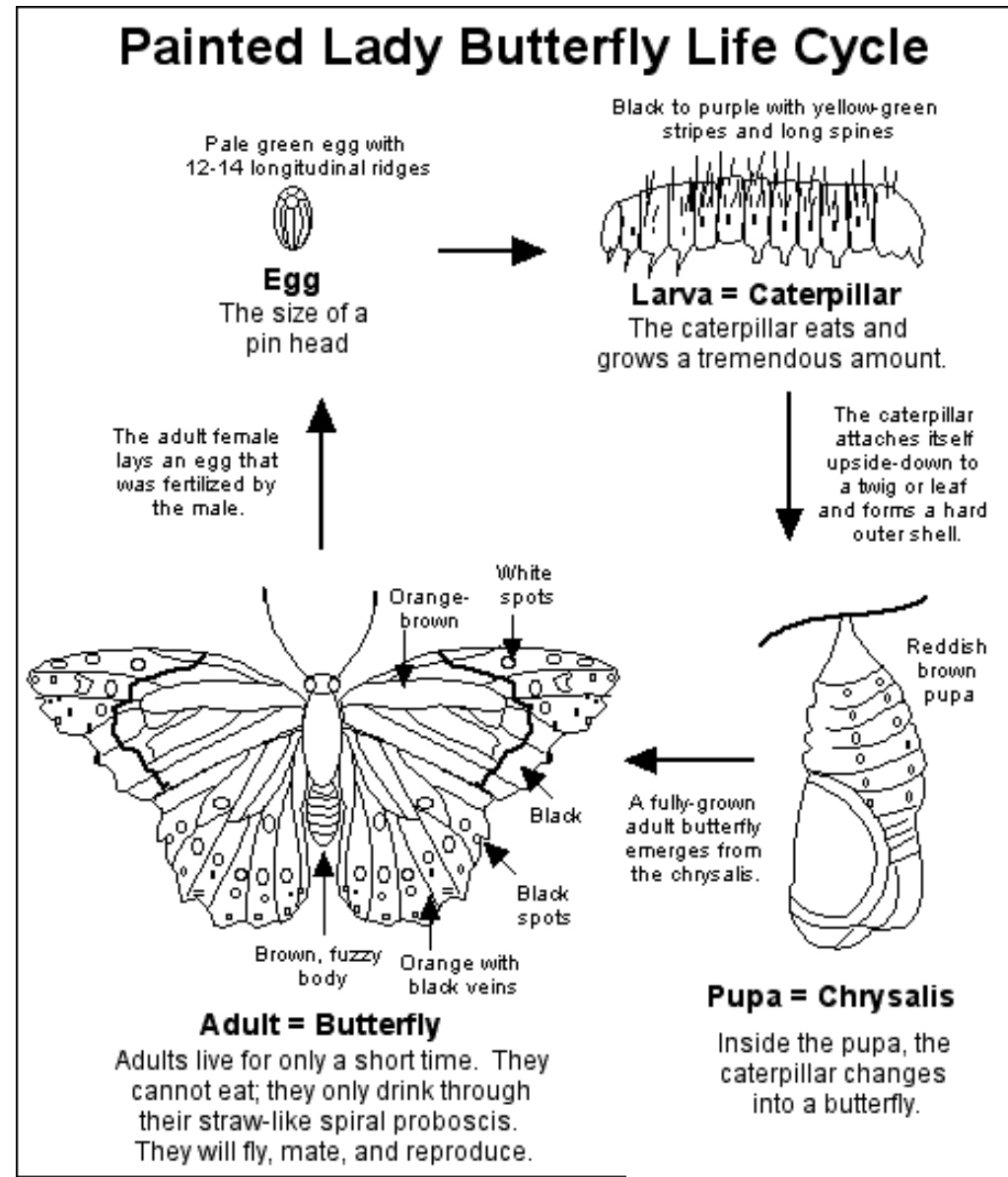
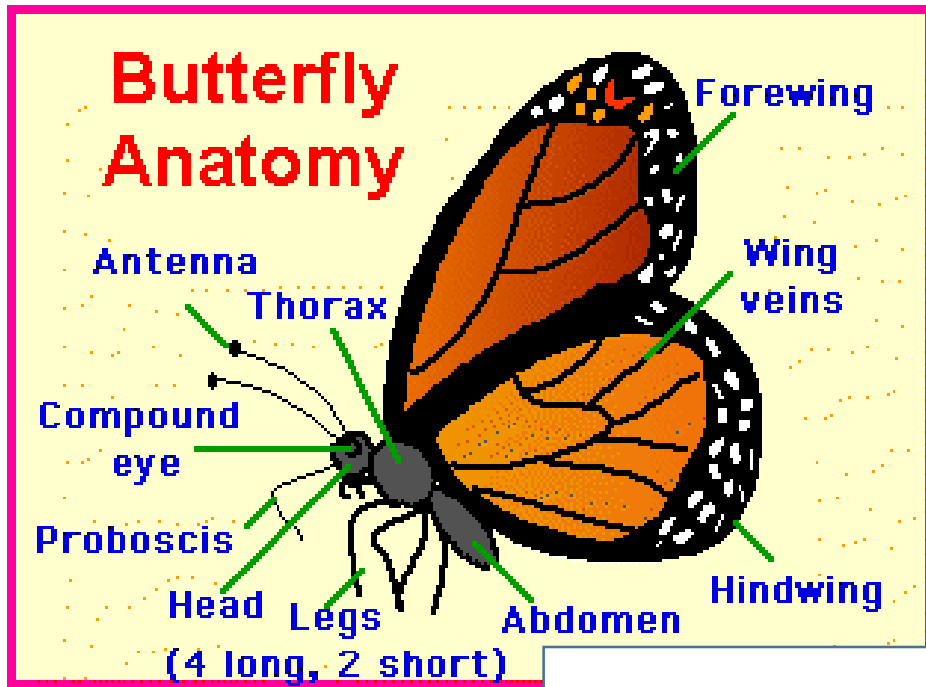
Although contacting and flirting with a mate is of the utmost importance to a butterfly, staying alive takes priority. With the use of their “talking wings”, butterflies send out clever messages, which are most effective in keeping predators at bay.

Think of a stop sign or a caution sign. Bold and brightly coloured, they get our attention by displaying hues such as orange, yellow, black, red and white. They remind us to “use caution” or warn us to “keep out” of an unsafe area.

Some butterflies also wear vibrantly coloured “wings of warning”. Boldly they caution predators to stay away. In “wing talk” they say to the approaching dragonfly, “It would be hazardous to your health to come near me!”

While certain species use brilliantly coloured wings to defend themselves, others would rather play it safe with good old fashion camouflage or disguise. Mother Nature has been quite creative when it comes to using butterflies scales for these purposes. Some of the designs that have formed over time are down right amazing. These "Talking Wings" say such things as I am *not* a butterfly...





<p>A BUTTERFLY IDENTIFY THE SPECIES:</p> <ul style="list-style-type: none"> • • • • • • 	<p>BUTTERLY FLYING FROM BUSH TO BUSH TAPPING WITH HER FEET</p> <p>(LOOKING FOR A PLACE TO LAY EGGS)</p>	<p>WASPS CRAWLING UNDERNEATH GREEN LEAVES</p> <p>(LOOKING TO EAT BUTTERFLY EGGS)</p>	<p>SPOTS OR SPECKS ON A LEAF/ STALK OR BRANCH'</p> <p>(MAY BE BUTTERFLY EGGS)</p>
<p>A LARVAE- CATERPILLAR STAGE</p> <p>(NEXT STAGE PUPA)</p>	<p>A PUPA- COCOON STAGE</p> <p>(NEXT STAGE BUTTERFLY)</p>	<p>A DEAD BUTTERFLY</p> <p>(HAS LAID EGGS AND SHORT LFE CYCLE HAS ENDED)</p>	<p>A BUTTERFLY FLYING INTO EAVES OR CRACKS</p> <p>(MAY BE A HIBERNATING SPECIES)</p>
<p>A BUTTERFLY DRINKING NECTAR</p> <p>(USING PROBOSCUS- OR CURLY TONGUE)</p>	<p>A BUTTERFLY DRINKING WATER FROM THE POND</p>	<p>LEAVES WITH HOLES IN THEM</p> <p>(EVIDENCE OF CATERPILLARS- EATING MACHINES)</p>	<p>UNUSUAL OBSERVATIONS</p> <p>e.g. Ants</p> <p>Shed skins or casts</p>



TORTOISESHELL BUTTERFLY

The beautiful peacock butterfly (*Inachis io*) is a well-known and instantly recognisable species thanks to its unique patterning. The stunning eyespots, which earn this species its common name, frighten predators, or divert birds from attacking the body [\(1\)](#). In stark contrast to the brightly coloured upper surfaces, the undersides of the wings are dull brown [\(1\)](#). The sexes are similar in appearance, but females are slightly larger [\(4\)](#). The caterpillar, which grows to 4.2 centimetres in length, has a black, spine-covered body freckled with fine white spots

Peacock butterfly biology

Usually one generation is produced each year. Females lay eggs in groups underneath nettle leaves during May, after around two weeks the eggs hatch. The caterpillars live in groups, protected by a web of silk, before dispersing to pupate, hanging underneath vegetation. The adults emerge around two weeks later, in late July. They gather together at sources of nectar, building up reserves to see them through hibernation, which usually begins in September ⁽²⁾ and occurs in hollow trees and other refuges, including attics. They do not mate until the following year, emerging from hibernation as early as February, with peak emergence occurring in April. Males defend territories in sunny locations, and chase any females that pass by.