

Notes for Teachers

Butterflies



Páirceanna Náisiúnta
National Parks

Butterflies are beautiful. With a bit of practice, anyone can learn to identify Ireland's 35 butterfly species.

In this lesson, we shall focus on the common species that may be seen in gardens. We shall look at their lives - what they do and their amazing life cycle.



What Age Group?

The Powerpoint slideshow can be used for any age group. Older children can investigate each species in more detail. But even infants will appreciate the different butterflies.

We have different optional activities to follow the slideshow - colouring in sheets, doodle sheets, identification posters and more.



Small Tortoiseshell - Ruán Beag

Aglais urticae

Slide 2



The Small Tortoiseshell is one of our most common butterflies. It is found wherever flowers grow. I'm sure you have seen them in your garden or school yard, or in the countryside and other wild places.

There are 35 species of butterfly in Ireland. Today we shall look at some of the common species.

Large White - Bánóg Mhór

Pieris brassicae

Slide 3

There are several white butterflies in Ireland. They can be hard to tell apart. The Large White is our biggest white butterfly.

All butterflies feed on flowers. They drink nectar using a special tongue called a proboscis. The proboscis is very long. When the butterfly is not feeding, it curls its proboscis up under its chin.



Green-Veined White - Bánóg Uaine

Pieris napi

Slide 4



The Green-veined White is our most common white butterfly.

It can be identified by the green markings along the wing veins.

In early spring, flowers can be scarce. Dandelions are a very important food source for many butterflies and other insects at this time.

Speckled Wood - Breacfhéileacán Coille *Pararge aegeria*

Slide 5

Most butterflies live in open, flowery places. Speckled Woods are unusual. They live near trees.

Each Speckled Wood holds a small patch of territory. If another butterfly enters its patch, the two will spiral up and up, higher and higher, until one gives up.

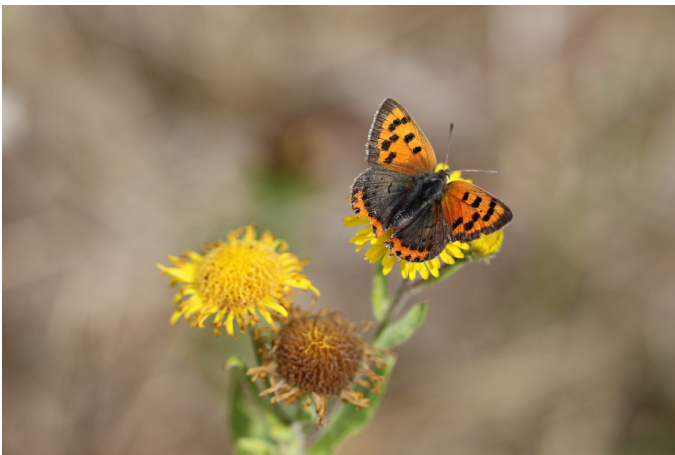
When the sun shines, a Speckled Wood will bask in a patch of sunlight in the forest. When the sun goes in, it flies up to rest high in the trees.



Small Copper - Copróg Bheag

Lycaena phlaeas

Slide 6



Small Coppers are one of our prettiest butterflies. They are widespread across Ireland, but usually only seen in ones or twos.

All butterflies need to warm up in sunshine before they can fly. To warm up, most species open their wings wide to collect as much heat as possible.

When it is too hot, the butterfly closes its wings.

Catching the Sun

Butterflies are cold blooded. They need to use the sun to warm up before they can move. This is called thermoregulation.



This butterfly has its wings wide open to catch the sun's heat.



This butterfly is warm enough. It has shut its wings to stop it overheating.

Orange Tip - Barr Buí

Anthocharis cardamines

Slide 7

This Orange Tip is resting. Its wings are closed.

Many butterflies have different markings on the undersides of the wings. Often they are camouflaged when they close their wings.

In the next slide we shall see what the Orange Tip looks like with open wings.



Orange Tip - Barr Buí

Anthocharis cardamines

Slide 8



No other Irish butterfly has orange tips to the wings.

This is a male. The females do not have the orange patches. They are white.

Many butterflies are only seen for a short period each year. The Orange Tip flies in spring. It is one of the earliest butterflies to be seen each year.

Males & Females

In some species, the males and female butterflies look the same. In other species, the two look very different.



This is a female Orange Tip. She lacks the male's orange patches.



Small Copper males and females look the same.

Brimstone - Buíóg Ruibheach

Gonepteryx rhamni

Slide 9

Some butterflies, like the Brimstone, always keep their wings closed when they are not flying. When they want to warm up, they tilt their wings and body sideways to catch the sun.

The Brimstone's wings look like a leaf. It is camouflaged when resting in a bush or in ivy.

What might want to eat a butterfly?



What eats butterflies?

Many creatures eat butterflies (and caterpillars). Here are just a few. You may think of more.

Birds



Spiders



Dragonflies



Common Blue - Gormán Coiteann

Polyommatus icarus

Slide 10



Male Common Blues are bright blue. Females are brown.

Both have a pattern of black and orange spots under the wings.

Common Blues can be found in many wild flowery places. They are less common in gardens.

Small White - Bánóg Bheag

Pieris rapae

Slide 11

As its name suggests, the Small White looks like a smaller version of the Large White. Both are common in gardens.

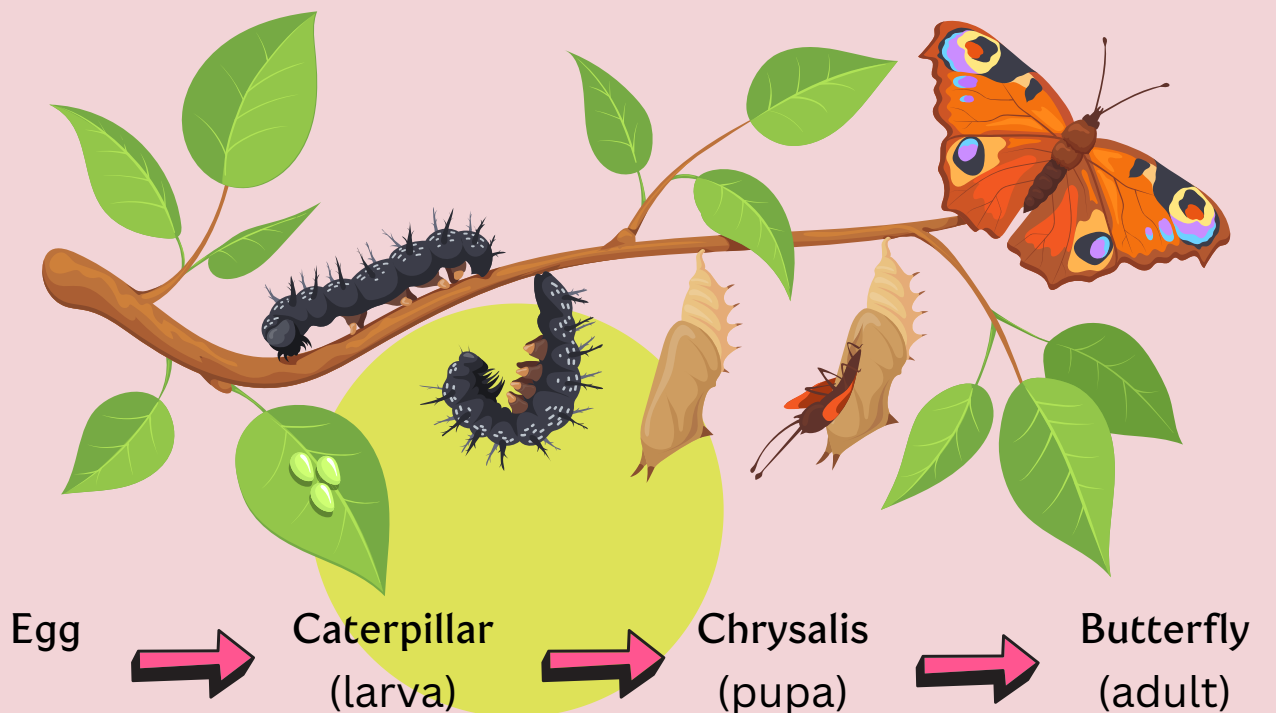
Both Small and Large Whites are also called Cabbage Whites. They lay their eggs on cabbages and similar plants.

Butterfly eggs come in amazing shapes and colours.



Life Cycle of a Butterfly (Metamorphosis)

Slide 12



The eggs are laid, either singly or in a group, on the foodplant(s). Each species has its preferred foodplants.

Caterpillars shed their skins several times as they grow bigger and bigger.

Inside the chrysalis, amazing changes are happening to the caterpillar.

The newly emerged adult is a butterfly. It must dry its wings before it can fly.

Caterpillars



Slide 13

Caterpillars are the larval stage of butterflies and moths. They have 6 legs close to their head. They also have gripping appendages, called pro-legs, that help them hold on to plants.

Caterpillars are eating machines. They moult their skin several times, becoming bigger after each moult. Some species will only feed on one type of plant. Others feed on a range of plants.



Chrysalis

When the caterpillar is fully grown, it will moult once more. First it must crawl away from its foodplant to find a safe place. The Peacock caterpillar needs somewhere to hang. It hangs by its tail end, and moults into a chrysalis. A chrysalis is the pupal stage of a butterfly or moth.

Some species lie on or under the ground to pupate.



Slide 14

Peacock - Péacóg

Inachis io

Inside the chrysalis, amazing changes have happened. Wings, antennae, and a proboscis have grown. The body now has a head, a thorax and an abdomen.

When the butterfly first emerges from the chrysalis, it must stretch out and harden its wings before it can fly.

The Peacock has eyespots on its wings. These false eyes help to scare predators away.

Slide 15



Meadow Brown - Donnóg Fhéir

Maniola jurtina

Slide 16



The Meadow Brown also has eye spots on its wings. It is a very common butterfly in grassy places and gardens.

The caterpillar of the Meadow Brown eats grasses. (Not the sort of grass that we have in our lawns, nor the grass that farm animals eat. The caterpillars need coarse, wild grasses - the types that grow in wild verges and wild meadows.)

Red Admiral - Aimiréal Dearg

Vanessa atalanta

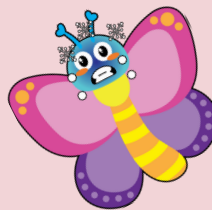
Slide 17

When winter comes, butterflies must hibernate. Most hibernate as an egg, a caterpillar or a pupa, depending on the species. However, a few species, such as the Red Admiral, hibernate as an adult. You may find one asleep in a shed.

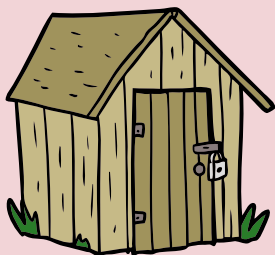
Small Tortoiseshells and Peacocks also hibernate as adults.



What to do,
if you find a butterfly
in winter.

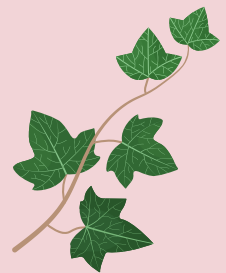


Sometimes a butterfly will hibernate in a cool room in our house. If we switch the heating on, it may wake up and start to fly around.



The butterfly needs to find a **safe, cool place** to complete its hibernation. Try moving it to a cool shed outside. But make sure that it will have a way to get out when it wakes in spring.

If you don't have a safe shed, try releasing it into a dense patch of ivy.



Painted Lady - Áileán



Vanessa cardui

Slide 18

Painted Ladies are summer visitors to Ireland. They fly here from Africa and southern Europe.

Painted Lady caterpillars feed on thistle leaves.

The flowers of thistles are rich in nectar. Many butterflies and other insects like to feed on them.

Comma - Camóg



Polygonia c-album

Slide 19

The Comma is a new species in Ireland. It has spread here from Wales. It is believed to be a sign of our warming climate.

It first appeared in Co. Wexford in 2000. It is spreading out, but it may not have reached your county yet. Keep your eyes open - you might be the first person to record it in your area.

Comma caterpillars feed on nettles.

Explore

Slide 20

Next sunny day, why not see how many butterflies you can spot.

Can you name them?

What are they doing?

What flowers are they visiting?



How can you help butterflies?

Slide 21

Let wildflowers grow (to supply nectar).

Let nettles and rough grass grow (for caterpillars to eat).

Plant nectar-rich flowers in your garden.

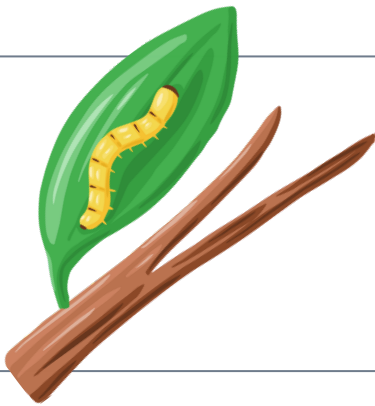
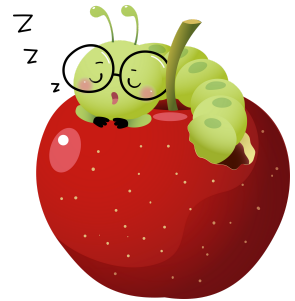
Avoid using chemicals in your garden.



Glossary - Gluais

Hibernate

To sleep through the winter.
The heart rate slows down, and the body temperature drops.

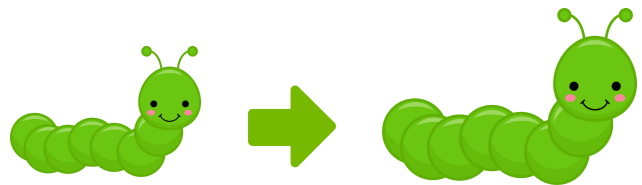


Larval Foodplant

A larval foodplant is the plant that a caterpillar eats.
Many insect larvae will only eat one type of leaf.

Moult

To moult (in a caterpillar) means to
shed the skin it has outgrown.



Species



A species is a distinct type of creature or plant.

A species has unique DNA. It can breed with others of the same species to produce fertile offspring.

We do not know exactly how many species there are on Earth. Over a million have been identified. But there may be 8 million, or even more.

In Ireland, we have identified over 30,000 species, but we think there may be at least another 10,000 that we have not identified.

We have only 35 species of butterfly in Ireland.

Protect Nature

We believe that every child deserves the opportunity to learn, love and protect Nature.



Learn

Learning to recognise our native plants and animals



Love

Growing to love Nature.
We love what we know.



Protect

Protecting Nature.
We protect what we love.

Follow On Activities

Each of our lessons have a toolkit of other activities, designed for various ages.

These include colouring-in sheets for the younger children, crosswords, quizzes and other activities for the older ones.

Why not take the children out into nature? We have notes to help you lead a nature walk.

What Next?

If you and the children enjoyed 'Butterflies', you may also enjoy our other lessons for primary schools.

We would love to hear from you

We hope your class enjoyed this lesson, and that you found the resources easy to use.

If you have any suggestions on this lesson, or ideas for future lessons, please email us.

