

# Butterfly **Shapes** & **Colours**

A tool for studying butterflies and moths











# Introduction

Butterfly Shapes and Colours was created by Matthew Bulbert and David Britton.

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# **Scope of the document:**

Bugwise Butterfly Shapes and Colours has been prepared by Australian Museum staff who work on butterfly and moth taxonomy, behaviour and ecology. The document provides information required to identify broad groupings of butterflies and day-flying moths based on their colouration, wing shape, flight pattern, and feeding preferences. Butterfly Shapes and Colours has been designed so that:

- (1) users do not need expert knowledge of butterfly or moth taxonomy;
- (2) specialized equipment is not required; and
- (3) animals are not harmed because they do not need to be collected.

Butterfly Shapes and Colours can easily be modified and applied to meet any number of project objectives and/or educational aims.

If you wish to comment on Butterfly Shapes and Colours, please visit our site at <a href="https://www.australianmuseum.net.au/bugwise">www.australianmuseum.net.au/bugwise</a> and either email us or post a comment on the forum.

On the website, you can also find more information about butterflies and moths and their role as pollinators and herbivores. Information on specific butterflies and moths can also be found via links on the Bugwise page.

Happy hunting!

The Bugwise Team







#### **DAY-FLYING MOTHS** – WINGS ANGLED DOWNWARDS AT REST

#### **Tiger moths**

Wingspan: small, 18mm - 50mm.

Flying style: rapid fluttering wing beat: flight weak and slow.

Perching style: wings held tent-like over body. Host plants: lichens and low growing herbs. Wings: black with bright orange or white spots. Body: tiger striped, black and orange or white.

## Vine moths

Wingspan: medium, 30mm - 70mm.

Flying style: fast awkward fluttering wing beat.

Perching style: wings held tent-like over body outstretched or folded.

Host plants: grape family.

Wings: black with white or orange spots.

#### **BUTTERFLIES – WINGS ANGLED DOWNWARDS AT REST**

#### **Blues and Coppers**

Wingspan: small to medium sized, 15mm - 50mm.

Flying style: slow to rapid wing beat; flight jerky and erratic.

Perching style: wings upright and pressed together; but open when basking in cooler weather.

Host plants: generally low-lying herbs, shrubs (wattles) or mistletoe.

Wings: Blues: upperside partly blue, underside a shade of brown to black and often patterned with bands.

Coppers: upperside and underside brown and orange.

## **Skippers**

Wingspan: small to medium, 22mm - 55mm.

Flying style: regular rapid wing beat; flight fast and direct.

Perching style: hind wings out flat or pressed to forewing; fore wings angled upwards, not touching; in sun

may bask with both pairs of wings outspread.

Host plant: grasses or sedges.

Wings: upper and underside of wings brown and orange

## **Browns, Ringlets and Xenicas**

Wingspan: small to large, 28mm – 65mm.

Flying style: slow to rapid wingbeat; flight generally jerky and erratic.

Perching style: wings upright and pressed together; in sun bask with wings outspread and often open and

close wings slowly; often roost in shade on hot days.

Host plants: grasses and sedges.

Wings: both sides brown; most have eye spots; most have cryptic patterning.

## **Argus**

Wingspan: medium, 40mm – 43mm.

Flying style: 1-2 rapid beats followed by short glide; flight fast and direct; frequently settle.

Perching style: generally perch with wings outspread or open and close wings slowly.

Host plants: variety of herbs and shrubs.

Wings: large eye spots on both fore- and hind- wing with orange rim; orange stripes on fore-wing;

underside much paler than upper side and lacks eyes on hind wing.

#### Vanessa

Wingspan: medium, 43mm - 50mm.

Flying style: rapid wing beat; flight fast and direct; frequently settle.

Perching style: generally perch with wings outspread or open and close wings slowly.

Host plants: varied woody herbs and shrubs.

Wings: edges frilled, no tails, orange-brown and splotchy or dark with an obvious yellow splotch on fore-

wing, eyes under hindwing.





















#### Glasswings

Wingspan: medium, 53mm - 56mm.

Flying style: infrequent and very slow wing beat, generally glides.

Perching style: wings upright and pressed together.

Host plants: Passion Flower family.

Wings: forewing see-through; generally dull brown and yellow.

## **Grass-yellows**

Wingspan: small, 30mm - 40mm.

Flying style: slow wing beat; flight fluttering and erratic.

Perching style: wings upright and pressed together.

Host plants: low shrubs.

Wings: bright yellow on both sides, often edged with black on forewing.

#### Whites

Wingspan: medium to large, 30mm – 70mm.

Flying style: slow to fast beat, some glide as well; flight fluttering and direct.

Perching style: wings upright and pressed together.

Host plants: variable shrubs (e.g. Caper family), mistletoe, trees.

Wings: at least underside of fore wing white (often edged with black), though it can be very dark in some females; underside highly variable in colour and pattern. Note well that the hindwing could be white to yellow to even black below.

#### **Emperors**

Wingspan: large, 70mm - 85mm.

Flying style: rapid wing beat; flight fast and direct.

Perching style: wings upright and pressed together or slightly open.

Host plants: varied woody herbs/shrubs.

Wings: hind wing with paired tails ("double-tailed"); upperside white and black; underside a cryptic pattern of white, brown, red, black and yellow.

## **Eggflys**

Wingspan: large, 60mm - 93mm.

Flying style: slow and gliding unless disturbed when they can be quite fast; frequently settle returning to

Perching style: wings upright and pressed together; always adjacent to open area.

Host plants: variety of woody herbs and shrubs.

Wings: upperside of wing dark to very dark with a single pale egg-shaped splotch on each wing; underside of wings generally yellow to orange brown

## **Wanderers and Tigers**

Wingspan: large, 60mm - 93mm.

Flying style: slow wing beat, interrupted by short gliding in some species; flight meandering and slow (note can be fast if disturbed).

Perching style: wings upright and pressed together; tend to hang from perch.

Host plants: variety of woody herbs and shrubs; usually with white 'latex' sap.

Wings: orange-brown with wing veins dark and obvious; often have a pale diagonal band across top of fore wing.

## Crows

Wingspan: medium to large, 52mm – 72mm.

Flying style: very slow wing beat; flight weak and sailing.

Perching style: wings upright and pressed together; tend to hang from perch.

Host plants: variety of woody herbs and shrubs; usually with white 'latex' sap.

Wings: primarily dark with white splotches; upper and underside are similar in appearance.

#### **Swallowtails and Triangles**

Wingspan: large to very large, 53mm – 110mm.

Flying style: slow to very fast wing beat, interrupted by short gliding in some species; flight erratic or direct.

Perching style: settle infrequently, wings flutter as they feed at a flower; if settled wings upright and pressed together.

Host plants: variety of woody herbs and shrubs.

Wings: hind wing frilled with or without a single tail; hindwing splotchy often with large central coloured or white stripe.























# **DAY-FLYING MOTHS**

**TIGER MOTHS** 





**VINE MOTHS** 







# **BUTTERFLIES**

# **BLUES & COPPERS**







**SKIPPERS** 





**GLASSWINGS** 









# **YELLOWS**





**ARGUS** 



**VANESSAS** 









**WHITES** 





**EMPERORS** 









# EGGFLYS





**TIGERS** 





# **WANDERERS**



CROWS



**SWALLOWTAILS** 







