

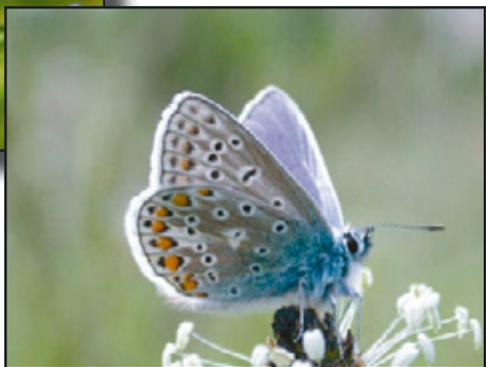
BUTTERFLIES AND DAY FLYING MOTHS OF THE MALVERN HILLS



‘A full colour guide to the butterflies and day flying moths of the Malvern Hills to encourage people to get out recording and to identify what they find.’

Acknowledgements

Compiled and edited by Susan Clarke and Jenny Joy, helped by many colleagues from Butterfly Conservation, English Nature, Malvern Hills AONB Office, Malvern Hills Conservators as well as volunteers, landowners, butterfly and moth recorders, transect walkers and others who provided material, information, advice and commented on the draft. Many thanks to: David Armitage, Mike Bradley, Trevor Bucknall, Colin and Helen Dolding, Ian Duncan, David Green, Dr Gilbert Greenall, Cherry Greenway, Michael Harper, Ian Hart, Rob Harvard, Peter Holmes, Chris Johnson, Richard Newton, Bridget Oleksy, John Tilt, Trevor Trueman, Gordon Whiting, Mike Williams and Digby Wood.



Photographs of High Brown Fritillary – Alan Barnes, Six-spot Burnet and Gatekeeper – Bridget Oleksy and Common Blue – Richard Newton

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Introduction

The Malvern Hills are famous for their beauty, complex geology and their natural mineral springs and wells. They run north to south for approximately 13 km and yield amazing views over Herefordshire, Worcestershire, the Severn Vale and on towards the Cotswolds. The Malvern Hills form about a 10th of the area officially designated as an Area of Outstanding Natural Beauty (AONB). The Malvern Hills AONB Partnership is charged with conserving and enhancing the natural beauty of the wider area and it does this by working with many landowners within the designation. The Hills themselves

their own Acts of Parliament, with conserving the wildlife as well as keeping the Hills and Commons open for public enjoyment.



Photograph by Gordon Whiting

The geological diversity and varied topography of the Malverns produces a richness of habitats within a fairly small area. This supports different land uses such as quarrying (in the past), arable farming, stock grazing, forestry, as well as tourism. The area also includes enclosed and open common land. It all combines to produce a mosaic of different vegetations, including rough grassland, bracken slopes, scrub, deciduous woodland and heath. It is this diversity that makes the Malvern Hills a haven for wildlife,



Photograph by Bridget Oleksy

are largely owned and managed by the Malvern Hills Conservators and the Conservators are charged, under

Management of the Hills

The Malvern Hills Conservators own and manage the vast majority of the Malvern Hills and Commons themselves, with the remainder owned and managed by other local landowners. The management of the 3000 acres of Hills and Commons is incredibly varied and uses a wide range of tools and strategies to improve the Hills for wildlife and people.

Most of the work involves management of grassland, bracken and scrub. All of these habitats have a value to wildlife and especially to butterflies and they all require management to keep them in the best condition.

In order to improve and maintain the value of the grassland and the bracken, sheep and cattle graze the hills and commons. Due to the poor economics of livestock farming much of the grazing on the hills and commons had ceased and the wildlife was beginning to suffer. The Malvern Hills Conservators have encouraged grazing back onto the Hills through support for local graziers and even by running their own flocks of sheep and herds of cattle, moving electric fences around the Hills to keep them in good condition. The grazing helps to increase the amount of wild flowers in the grassland to help butterflies like the Dingy Skipper and breaks up the bracken layers to encourage violets for

High Brown Fritillary caterpillars to feed on.

Other conservation work is focused on bracken and scrub control. Rolling helps to weaken the bracken and gives wild flowers a chance in the grassland. The scrub is cut on a cycle, always retaining some for the butterflies and moths dependant on it. The scrub cutting and fence moving is back breaking work and is carried out by the Malvern Hills Conservators staff along with some committed volunteers. These specially managed wildlife areas are mapped using sophisticated techniques that record this good management year on year so that the Conservation Officer at the Malvern Hills Conservators can keep track of progress.

Using these techniques, alongside the grazing, helps to keep the Hills and Commons in a natural balance. Ideally the level of grazing should eventually control the levels of bracken and scrub on its own providing lots of good habitat for butterflies with less intervention from people.

Rob Havard (Conservation Officer)
Malvern Hills Conservators

The butterflies of the Malvern Hills

A large variety of butterflies and moths can be found within the special habitats provided by the Malvern Hills and one of the rarest of these is the High Brown Fritillary. Until the 1950s this was a widespread butterfly across much of England and Wales, but it has since declined rapidly. The Malvern Hills are one of the few areas where this butterfly can still be found, but its population has severely declined here as well. Conservation of this butterfly has been of high importance to the Malvern Hills AONB who have been working with the Malvern Hills Conservators and other local landowners coordinating a project to reintroduce grazing to the southern hills and thus conserve the habitat for this most rare butterfly.

Other butterflies of special interest are the Dingy Skipper, Green Hairstreak, White-letter Hairstreak, Dark Green Fritillary, Silver-washed Fritillary, Marbled White and Grayling. A notable new species in the area is the Essex Skipper which was first recorded on Castlemorton Common in 2002.

With the exception of the Marbled White, these species are not common in this region. Marbled White are found in good numbers at certain sites, but is of particular interest as it is on the edge of its range here.

This booklet cannot show all of the

butterflies that live on the Malvern Hills, but includes the most common and some of the rarities, special to this area. It also shows a few of the day-flying moths that often get mistaken for butterflies.

What are butterflies and moths?

Butterflies and moths comprise the order of insects called Lepidoptera (meaning scale wing). We think of moths as being very different to butterflies, but they are actually extremely similar. Butterflies fly during the day but so do many moths. Some moths will only fly during the day when disturbed from resting in vegetation, but quite a few are truly day-flying. Both butterflies and moths have four life cycle stages and different species spend differing lengths of time in each of the stages. The adult stage is usually only a very short period in the total life span.

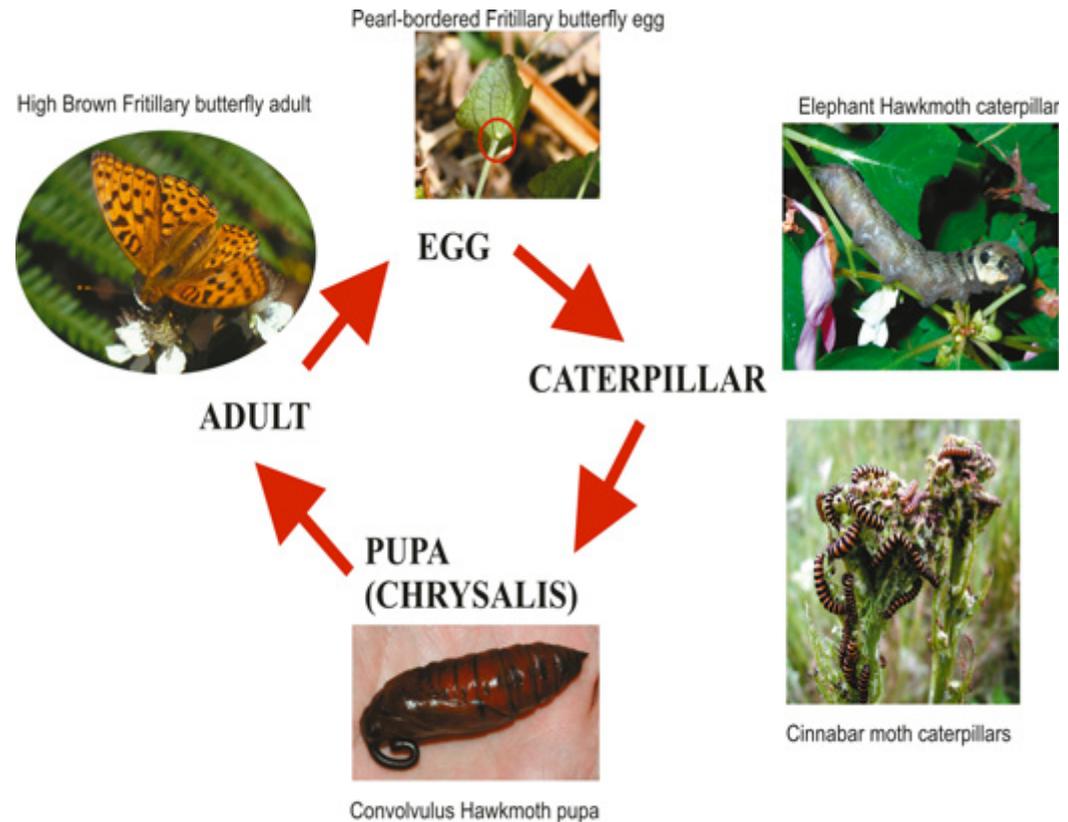
Why look for butterflies and day-flying moths?

Butterflies and day-flying moths are easy to find, easy to watch and not too difficult to photograph. You don't need to sit for hours in a hide or carry any equipment, although binoculars can be most useful. You don't need to be an expert in order to identify the common species and there are many good, cheap identification guides that

can be slipped into a pocket. A walk can be enhanced by looking out for these colourful insects and perhaps recording what you see. If you regularly walk a site then it can be rewarding to note the changing species throughout the summer. Children can get quite absorbed trying to spot butterflies and can become extremely good at identification surprisingly quickly. The behaviour of butterflies and moths is fascinating and surprisingly there is still much that is unknown. Watching

a butterfly as it searches for places to lay eggs or to find a mate can be most interesting, and even casual observers often come up with totally new information about a species.

If you want to share your interest then there are local groups which offer field trips, social events and talks where you can learn more about Lepidoptera.



Photographs by Susan Clarke, David Green and Bridget Oleksy

How to identify

Use the pictures and descriptions to find the species that match what you have seen. The diagram on page 7 will help by showing the body parts and terms used in the descriptions.

When you have made an identification then check against the flight periods on page 9. Sometimes butterflies and moths can be seen slightly outside of their usual flight periods, but if the dates are very wrong, then the identification is probably wrong.

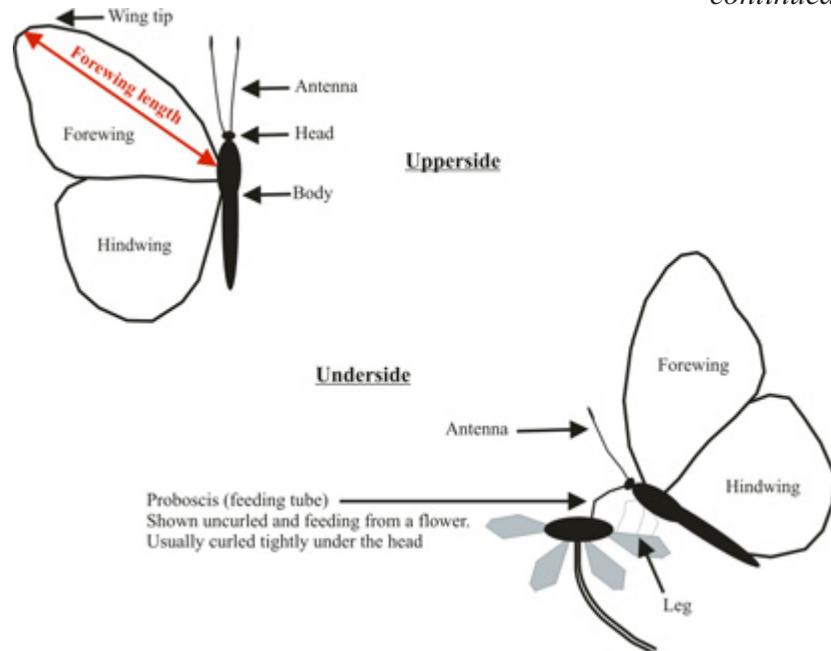
Photographs are most helpful. Even a poor photograph can show details missed in the field.

When and where to look

Most butterflies and day-flying moths will avoid flying in cold, windy or wet weather. You will see the greatest number on sunny, warm days between 10 am and 5 pm. However, even in cold weather you may be able to find some in sheltered habitats such as quarries or glades and a few, like the Ringlet butterfly, are happy to fly in the rain. Interestingly, on very hot days (over 28C) many butterflies will stop flying and will sit deep in shade to avoid overheating.

If you want to see these insects close-up then search for good nectar sources – that is plants that produce nectar on which adults can feed. Bramble,

continued page 11



From left to right:
 Small Skipper - David Green
 Large Skipper - Richard Newton
 Large White - David Green
 Brimstone - Alan Barnes
 Small White - David Green
 Green-veined White - Richard Newton

Flight periods of butterflies and moths

	March	April	May	June	July	Aug	Sep	Oct
6 spot Burnet								
Brimstone								
Brown Argus								
Burnet Companion								
Cinnabar								
Clouded Yellow								
Comma								
Common Blue								
Dark Green Fritillary								
Drab Looper								
Essex Skipper								
Gatekeeper								
Grayling								
Green Hairstreak								
Green-veined White								
High Brown Fritillary								
Holly Blue								
Hummingbird Hawkmoth								
Large Skipper								
Large White								
Marbled White								
Meadow Brown								
Narrow-bord'd 5-spot Burnet								
Orange-tip								
Peacock								
Purple Hairstreak								
Red Admiral								
Ringlet								
Scarlet Tiger								
Silver-washed Fritillary								
Small Copper								
Small Heath								
Small Skipper								
Small Tortoiseshell								
Small White								
Speckled Wood								
White-letter Hairstreak								

Red bars - show the main flight period/s of each species. Some species have more than one brood per year, so more than one flight period is shown. Some have many broods each year and the timing of gaps between broods can be unpredictable. In these cases, a single bar without gaps is shown.

Orange bars - show times when immigrant species might occasionally be seen, outside of the usual period of sightings.

Sites to visit in the Malvern Hills See centre pages for map

Site	Butterflies and day-flying moths	Access and facilities
1. North Hill and Table Hill area	Green Hairstreak, Marbled White, Grayling	Paths and tracks. Park at North Malvern Quarry, Great Malvern or West Malvern M
2. Malvern Common	Scarlet Tiger, Burnets, Small Copper, Small Skipper, Marbled White, Comma	Paths and tracks. Car park on common. Peachfield Road. E
3. Herefordshire Beacon/British Camp	Many common species	Pay and Display car park (SO764404), café, hotel and toilets nearby. Marked trails from car park. M
4. Broad Down	Grayling, Hummingbird, Hawkmoth	Pay and Display car park (SO764404), café, hotel and toilets nearby. Marked trails from car park. M/D
5. Swinyard Hill	Common Blue, Marbled White	Pay and Display car park (SO765382) at base of hill. Some surfaced paths and marked trails. E/M
6. Gullet wood and quarry area	White-letter Hairstreak, White Admiral, Silver-washed Fritillary	Limited parking at quarry, or nearby Pay and Display car park (SO765382). Surfaced tracks and marked trails. M
7. Midsummer Hill and Ragged Stone Hill	Holly Blue, Marbled White	Free car park (SO759369). Unsurfaced paths and a surfaced track/road. M/D
8. Castlemorton Common	Dark Green Fritillary, Marbled White, Burnets	Pay and Display car park (SO765382) on edge of Common. Some surfaced paths. E
9. Chase End Hill and Whiteleaved Oak	Silver-washed Fritillary, Wall Brown, Drab Looper	Limited roadside parking (SO758353). Permissive footpaths (Bromsberrow Estate). M/D

E = Easy walking over most of the site. **M** = moderately easy walking over most of the site, but some steep or rough terrain. **D** = Difficult walking, steep gradients and/or rough terrain over much of the site.

knapweeds, thistles, Hemp-agrimony, Fleabane, Ragwort and Buddleia are particularly good. Find a sheltered patch of nectar, wait patiently and fairly still until the insects land and feed. This is also a great way to get photographs.

The main butterfly season is from April/May to September/October although some butterflies will be seen earlier and also later. The table on page 9 shows the flight periods of the species covered in this booklet.

Recording your sightings

Records are essential for conservation and with many of our butterflies and moths in serious decline, this is of great importance. Without knowing about the existence or population size of a species on a particular site, it is difficult to consider any conservation measures. It is not just the rare or endangered species that it is important to record and often sightings of common species are lacking, everyone thinks someone else will have sent in the records. Actually, information about common species is excellent at showing changes in habitat and all sightings provide a valuable historical record.

There are a few details that must be provided if a record is to be of use.

1. An accurate date
2. Where the species was seen. A six figure grid reference with a site name is perfect (e.g. SO763399, British Camp), but if this is not possible then a photocopy of a map with a cross will do nicely. Site names alone can be confusing – there can be lots of Beacon Hills in a county!
3. What species was seen and how many
4. Your name and address

Other information can be added if you wish, including copies of photographs to confirm identification.

The very best way to provide a record is on standard forms that can be requested or downloaded from “Butterfly Conservation” (address and web site on back page). These include instructions on how to complete the form and how to work out grid references. However, all records are valuable, even if they are scribbled on a postcard!

Whatever method you use, records can be sent to “Butterfly Conservation”.

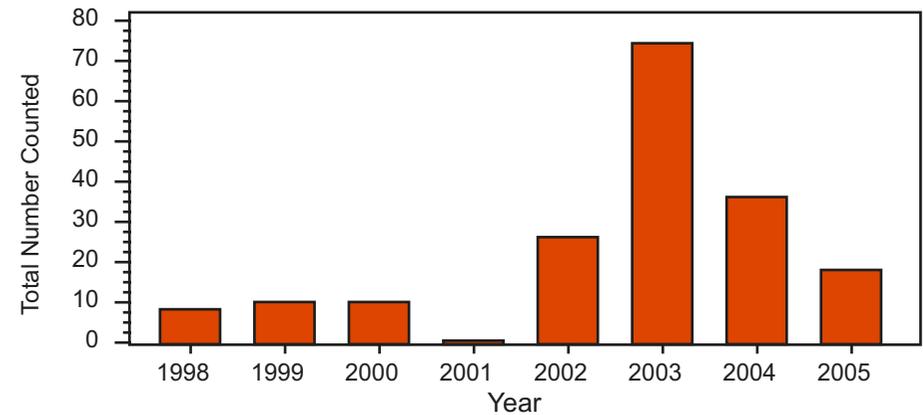
Butterfly research

As part of the recording of Lepidoptera on the Malvern Hills, local people have been carrying out “butterfly transects”. These are set routes that are walked by volunteers once each week from April to September, where all butterflies and day-flying moths seen along the routes

web site on back page). Most Butterfly Conservation branches publish annual reports that detail the latest sightings, conservation information and research for their region.

The graph below illustrates the type of information that can be collected by butterfly transects. Over the years, this

1. Common Blue butterfly at Castlemorton Common



are counted. The information collected can be used to show what is happening to each species on these sites, from year to year.

Butterfly Conservation is always looking for new volunteers to train to carry out transect walks. If you are interested do contact your local branch of Butterfly Conservation (address and

can show how well species is doing at each site. (Information is missing for 2001 due to Foot and Mouth Disease restricting access to the transect routes.)

Sites to visit in the Malvern Hills



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Species accounts

The following pages give details of some of the species that might be encountered on the Malvern Hills. Each account includes the following.

· **Description.** The species descriptions and the photographs highlight the features that you are most likely to see in the field. So, if a butterfly usually rests with its wings closed then the underside only will be pictured. It may help to refer to the diagram on page 7 showing the structure of a butterfly.

· **Forewing length.** This is the distance from the forewing tip to the point where it joins the body (see page 7). This measurement can be taken even if the butterfly or moth has its wings held shut. The length gives a rough idea of size, but there will be individual differences and in many species there is also a small difference in size between male and female.

· **Rarity and habitat.** This is the rarity and habitat of a butterfly or moth on the Malvern Hills and surrounding area. This may differ from that in other locations. “Common” means large numbers of that species will be seen each year. “Fairly common” means moderate to low numbers are likely to be seen each year. If a species is noted as “Scarce” then very low numbers are

likely and possibly in some years none will be seen.

· **Similar species.** These are other Malvern Hills species that could look similar and cause confusion in identification.

Small Skipper (*Thymelicus sylvestris*)

A small orange-brown butterfly which “zooms” over grassland, often looking rather like a moth. It rests with its forewings held at an angle to the hindwings. The male has a dark mark across the forewing, but this is absent in the female. (Picture on page 8). Forewing length: 13 mm (0.5 in).

Rarity and habitat. Common. Found in habitats where there is some rough grassland.

Similar species. 1. The Essex Skipper looks almost identical. Even with experience, the two species are hard to distinguish. 2. The Large Skipper can be hard to tell apart from the Small Skipper in flight. The Large Skipper has a mottled pattern on the upper and underside unlike the plainer colouring of the Small Skipper (see below).

Large Skipper (*Ochlodes venata*)

A small, fast-flying, mottled orange-brown butterfly often found on grassland. It can look rather like a moth and rests with its forewings held at an angle to the hindwings. The male has a dark mark across the forewing, but this is absent in the female. (Picture on page 8). Forewing length: 15 mm (0.6 in).

Rarity and habitat. Common. Found in habitats where there is some rough grassland.

Similar species. Small Skipper (see above).

Large Skipper is on the wing before Small Skipper and Essex Skipper is the last to appear. By mid-July all three species can be flying together.

Brimstone (*Gonepteryx rhamni*)

One of the first butterflies seen in early spring. Most people recognise the bright yellow wings of the male, but may not know that the female is pale greenish-white. This species always seems to hold the wings closed when at rest. (Picture on page 8). Forewing length: 30 mm (1.2 in).

Rarity and habitat. Common. Found in almost any habitat.

Similar species. 1. The Clouded Yellow can look slightly similar, but is usually yellow-orange in colour. It does have a white form, but both forms have broad black wing tips, unlike the Brimstone. 2. The Large White can be mistaken for female Brimstone, especially in flight, but unlike the Brimstone, it has black wing tips.

Large White (*Pieris brassicae*)

Small White (*Pieris rapae*)

Green-veined White (*Pieris napi*)

These three species are often lumped together under the description of “cabbage butterfly”.

The Green-veined White, as its name suggests, has black-greenish dusting along the wing veins, the amount of this “dusting” varies between individuals. (Picture on page 8). Forewing length: 23 mm (0.9 in).

The Small White can be easily confused with the Green-veined White. It does not have the dark dusting along wing veins, but worn specimens can be hard to distinguish. (Picture on page 8). Forewing length: 25 mm (1.0 in).

The Large White also does not have dark colouring along the wing veins

and is usually distinguished from the other two species by its larger size. (Picture on page 8). Forewing length: 30 mm (1.2 in).

Rarity and habitat. Common. Found in most habitats.

Similar species. 1. Orange-tip females do not have an orange tip to their wings and so can look like Small or Green-veined White. However, the underside of Orange-tip hindwings have a mottled-greenish pattern (see below). 2. Female Brimstones can look similar to Large White, but are a light green colour and do not have black wing tips.



Orange-tip
(*Anthocharis cardamines*)

The male is easy to identify with a bright orange tip to the wings. Females have a black/grey tip. Both sexes have a beautiful mottled-greenish pattern on the underside of the hindwing, showing clearly when the wings are closed.

Forewing length: 22 mm (0.8 in).

Rarity and habitat. Common. Found in many places, but especially in damp habitats.

Similar species. Small and Green-veined White look similar in flight to female Orange-tip, but they do not have the mottled pattern on the underside of the hind wing (see page 17).

Green Hairstreak
(*Callophrys rubi*)

The upperside of this small butterfly is a nondescript brown, but it hardly ever rests with its wings open and the underside is bright green. It seldom flies far, staying close to vegetation, often crawling over shrubs and so it can be difficult to spot. (Picture on front page, second right). Forewing length: 14 mm (0.5 in).

Rarity and habitat. Scarce. Found mainly in scrubby habitat, especially around gorse. Interestingly, this species has a particularly late flight period on the Malvern Hills.

Similar species. It is difficult to confuse this butterfly with any other species.

White-letter Hairstreak
(*Satyrium w-album*)



A small grey-brown butterfly which can be seen nectaring on flowers, but spends much time in the tree canopy. The upperside is dark brown, but it nearly always holds the wings closed when at rest. It has a band of orange on the underside of the hindwing near to a small “tail”. There is a thin white line across the upper and hindwing underside, forming a sharp-angled “W” shape on the hindwing. Forewing length: 15 mm (0.6 in).

Rarity and habitat. Scarce. The caterpillar feeds on elm, but the adult can be found in woodlands or hedgerows, often some distance from any elms.

Similar species. The Purple Hairstreak can look similar and is common on the Malverns. It is usually seen high up in oak trees, seldom comes near the ground. Both sexes have some purple on the upperside. The underside is light grey and unlike the White-letter Hairstreak it has an orange eyespot on the hindwing near the “tail”. Also, the

white line across the underside has an indistinct zigzag not a sharp-angled “W” shape on the hindwing.

Small Copper
(*Lycaena phlaeas*)

A very beautiful copper-coloured small butterfly. Often quite active and noticeable. (Picture on front page, far left). Forewing length: 15 mm (0.6 in).

Rarity and habitat. Common. Found in a wide-range of habitats.

Similar species. It is difficult to confuse this butterfly with any other species.

Common Blue
(*Polyommatus icarus*)

The male is a bright blue and easily seen, but the female is more furtive. Some females are dark brown, some have blue mixed with the brown and others are almost totally blue. Females, unlike males, always have orange spots along the margin of the upperside hind and forewings. Both sexes have orange spots along the margin of the underside hindwing. (Picture on page 1, bottom). Forewing length: 14 mm (0.5 in).

Rarity and habitat. Common. Found in many grassland habitats.

Similar species. Butterflies of the “blue”

family can be difficult. Similar species found on the Malvern Hills are: 1. Holly Blue, this species does not have orange spots on the underside and usually flies high (at head height or above) around trees or scrub (see below), whereas the Common Blue tends to fly closer to the ground. 2. Brown Argus can be confused with female Common Blue and distinguishing the two needs experience. However, Brown Argus is only occasionally recorded on the Malverns.

Holly Blue
(*Celastrina argiolus*)



This butterfly tends to fly high around trees and shrub. Both sexes are blue and the females have black tips on the upperside forewing. They seldom sit with wings open and the underside is very light blue with small black spots. Forewing length: 16 mm (0.6 in).

Rarity and habitat. Common. Found in woodland, scrub and hedgerow habitat.

Similar species. The Common Blue can look similar, but it has orange spots

on the underside wing margin and does not often fly above head height.

Red Admiral
(*Vanessa atalanta*)



Small Tortoiseshell
(*Aglais urticae*)



Peacock
(*Inachis io*)



Comma
(*Polygona c-album*)



These four colourful butterflies are regularly found in gardens. Looking at the upperside patterns the differences between the species are clear.

The Red Admiral is recognised by its red bands against a dark background. Forewing length: 30 mm (1.2 in).

The Small Tortoiseshell has yellow and dark squares along its wing edge, a reddish background and blue “beading” along the wing margins. Forewing length: 24 mm (0.9 in).

The Peacock has a large eye-spot pattern on each of its wings. Forewing length: 30 mm (1.2 in).

The Comma has an orange and brown pattern with jagged wing edges. Forewing length: 27 mm (1.1 in).

Rarity and habitat. Common. Found in many habitats.

Similar species. Fritillary butterflies in flight can be mistaken for the Comma but fritillaries are rare on the Malvern Hills. Anyway, the Comma is a deeper orange colour and once it lands the jagged wing edge is apparent.

High Brown Fritillary
(*Argynnis adippe*)

The Malvern Hills is one of the few sites in England where this butterfly can be seen and only a handful are recorded

here each year. Any records for this species are of great importance. It is a large, fast-flying butterfly with orange and brown markings on the upperside. The underside hindwing has large silver spots on a mainly reddish-orange background and a characteristic band of small silver spots, each within reddish halos. The High Brown Fritillary is protected by law and it is illegal to catch, handle or disturb this butterfly without a licence from the appropriate Government Agency. (Picture on page 1, top). Forewing length: 30 mm (1.2 in).

Rarity and habitat. Scarce. Found on bracken-covered hillside and also in sheltered clearings and damp grassland where it feeds on nectar sources such as thistles.

Similar species. 1. The Dark Green Fritillary is very similar but is rarely seen on the Malvern Hills. Its underside pattern is greenish with silver patches, lacking the red colouring or red-haloed silver spots. 2. The Silver-washed Fritillary is a larger butterfly and the underside hindwing has silver streaks on a greenish background (see below). 3. In flight, the Comma can look similar, but it is a deeper orange colour and once it lands, the jagged wing edge is apparent.

Silver-washed Fritillary
(*Argynnis paphia*)



A large fast-flying butterfly, often gliding when in flight. Its upperside orange and brown markings differ slightly between the sexes. The underside hindwing has silver streaks on a greenish background and green spots near the wing margin. Forewing length: 33 mm (1.3 in).

Rarity and habitat. Scarce. Found in woodland and wood edges particularly on the southern hills, it will fly into open habitat to find nectar.

Similar species. 1. High Brown Fritillary and 2. Dark Green Fritillary can sometimes be confused with this species. However, both lack silver streaks on the underside hindwing. 3. In flight, the Comma can look similar but it is smaller, a deeper orange colour and once it lands, the jagged wing edge is apparent.

Speckled Wood
(*Pararge aegeria*)



A dark-brown butterfly with pale patches and eye-spots on the upperside fore and hindwings. The males often sit with wings open in patches of sunlight filtering through woodland. Forewing length: 21 mm (0.8 in).

Rarity and habitat. Common. Often found in shady habitats such as woodland glades and hedgerows.

Similar species. 1. The Grayling is superficially similar, but has a streaky appearance, not distinct pale patches, on the upperside. It also has two, not one, eyespots on the forewing.

Marbled White
(*Melanargia galathea*)

A smart-looking black and white species. (Picture on front page, far right). Forewing length: 25 mm (1.0 in).
Rarity and habitat. Common in some parts of the Malverns. Mainly found in grassland habitat.

Similar species. It is difficult to confuse this butterfly with any other species.

Grayling
(*Hipparchia semele*)



A well camouflaged dark-brown butterfly with streaky pale patches and eye-spots on the upperside fore and hindwings. It nearly always rests with wings closed and will drop the forewing beneath the hindwing so that its eyespots are hidden. In this position it can blend in beautifully with the background. Forewing length: 26 mm (1.0 in).

Rarity and habitat. Fairly common. Occurs in small numbers on hill tops and in quarries where there is short grass and bare ground.

Similar species. The Speckled Wood is superficially similar, but has distinct pale patches on the upperside. It also

has one, not two eyespots on the forewing.

Small Heath
(*Coenonympha pamphilus*)



A small neat looking butterfly which often rests with its wings closed. The upperside is a fairly uniform light-orange colour with a small eyespot. It is well camouflaged when at rest. Forewing length: 17 mm (0.7 in).

Rarity and habitat. Common, but has declined recently. Usually found on short grassland, often around hill tops.

Similar species. It is not usually confused with any other species that may be found on the Malvern Hills.

Ringlet

(Aphantopus hyperantus)



Gatekeeper

(Pyronia tithonus)

Meadow Brown

(Maniola jurtina)



Three medium sized “brown” butterflies which can look similar.

The Gatekeeper is the smallest, with large orange patches surrounded by brown on the upperside of fore and hindwings. The male has a brown streak across the upperside forewing. (Picture on page 1, second top). Forewing length: 20 mm (0.8 in).

The Meadow Brown female has orange patches surrounded by brown on the

upperside of fore and hindwings, but the orange area is usually small and faded on the hindwing. Males are much darker with little or no orange on the upperside. Forewing length: 25 mm (1.0 in).

The Ringlet is uniform dark brown with a series of eyespots “ringlets” on upper and underside. Forewing length: 23 mm (0.9 in).

Rarity and habitat. Common. Found in many habitats, especially grasslands. The Ringlet particularly likes shady woodland edge or woodland rides. Their flight periods and habitats overlap, so they may be found together.

Similar species. 1. Gatekeeper and Meadow Brown females can seem similar, but in Gatekeepers the orange patch on the upperside forewing is sharply defined and reaches the edge of the wing alongside the body. In Meadow Brown, the orange patch has an indistinct edge and does not reach to the body. In general, Gatekeeper has a much neater, sharper appearance. 2. Meadow Brown males and Ringlets can be confused in flight, but Ringlet has a white fringe to the wing edges and is darker than Meadow Brown. Usually the many eyespots of Ringlet and the single upperside eyespot of Meadow Brown will distinguish the two.

Six-spot Burnet

(Zygaena filipendulae)

An almost metallic-looking moth with red hindwings. The forewing has six red spots on a greenish-black background, but the two “spots” near to the head tend to merge into one patch. (Picture on page 1, second bottom). Forewing length: 17 mm (0.7 in).

There is a very similar species on the Malverns which has only five red spots: the Narrow-bordered Five-spot Burnet (*Zygaena lonicerae*).

Rarity and habitat. Common. Found in many grassland habitats.

Similar species. The Cinnabar moth is also black and red, with red hindwings. It has only two red spots and two red streaks on each forewing and has thread-like antennae not the thick hooked antennae of the Burnets.

Drab Looper

(Minoa murinata)



A small, plain day-flying moth which

usually rests with wings open. It has un-patterned light brown to mid-brown wings. Forewing length: 10 mm (0.4 in).

Rarity and habitat. Scarce. Found in woodland clearings and along wood edge.

Similar species. There are no other day-flying moths that have such plain wings.

Hummingbird Hawkmoth

(Macroglossum stellatarum)



At rest this moth is unlikely to attract attention, but in flight its orange-brown markings show clearly. It is especially noticeable when hovering, with the proboscis deep inside a flower. This behaviour and its wide hairy body means it is often mistaken for a hummingbird. The rapid wing beats can even make the brown markings on the forewing look like feathers. Forewing length: 22 mm (0.8 in).

Rarity and habitat. Scarce. Most seen

in Britain are probably immigrants from southern Europe and north Africa. Found in many habitats, often on Buddleia in gardens.

Similar species. No similar species are likely to be seen on the Malvern Hills.

Scarlet Tiger

(Callimorpha dominula)

A brightly coloured black, orange and red moth. It often rests with its red and black hindwing fully hidden. (Picture on front page, second left). Forewing length: 25 mm (1.0 in).

Rarity and habitat. Scarce. Records of this species are particularly valuable. Found in many habitats, especially damp grasslands.

Similar species. There are other Tiger moths that can look slightly similar, but the orange “smug” across the white patches near to the head is characteristic.

Cinnabar moth

(Tyria jacobaeae)



A striking moth with red hindwings, two red strips and two red dots on each forewing against a black background. The black and orange ringed caterpillars of this moth are often seen feeding on Ragwort (picture on page 5). Forewing length: 20 mm (0.8 in).

Rarity and habitat. The adult moth is fairly common, but the caterpillars are more regularly seen. Found in many habitats.

Similar species. The Burnet moths are also black and red, with red hindwings but they have more than two red spots on each forewing and have thick hooked antennae not the thread-like antennae of the Cinnabar.

Burnet Companion

(Euclidia glyphica)



A small brown patterned moth with yellow on the hindwings. It can be seen making short rapid flights over grassland, then diving into the vegetation. Forewing length: 14 mm (0.5 in).

Rarity and habitat. Scarce, only found at a few sites. Uses grassland habitat.

Similar species. Some small brownish butterflies such as the Dingy Skipper can look similar. The Burnet Companion has thread-like antennae rather than the club antennae of butterflies. Also, butterflies commonly rest on top of vegetation, rather than diving into the base as is typical of this moth.

Photographic Credits

Drab Looper (David Green)

Hummingbird Hawkmoth (David Green)

Grayling (Richard Newton)

Purple Hairstreak (Alan Barnes)

Cinnabar (David Green)

Burnet Companion (Richard Newton)

Small Heath (David Green)

White-letter Hairstreak (Alan Barnes)

Meadow Brown (Susan Clarke)

Peacock (Richard Newton)

Comma (Richard Newton)

Holly Blue (David Green)

Red Admiral (Alan Barnes)

Silver-washed Fritillary (Alan Barnes)

Speckled Wood (Richard Newton)

Ringlet (David Green)

Orange-tip (Alan Barnes)

Small Tortoiseshell (David Green)

Important information

For information on the law applying to Lepidoptera, also for policy regarding netting, collecting, breeding and photography contact Butterfly Conservation or English Nature.

Useful addresses and web sites

Butterfly Conservation
Manor Yard
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BH20 5QP.

Tel: 01929 400209

www.butterfly-conservation.org.

Contact details for local branches available on the web site.

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